

GRAIN & FEED JOURNALS

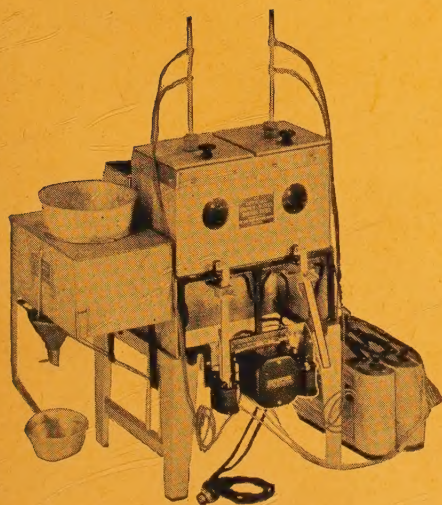
CONSOLIDATED

A Merger of Grain Dealers Journal, American Elevator & Grain Trade, Grain World and Price Current-Grain Reporter

WHEN BUYING CORN DON'T BUY WATER!

with SEEDBURO EQUIPMENT

you can be sure!



Two-compartment size Official Brown-Duvel Moisture Tester, equipped with time-saving Electric Automatic Shut-off Device.

SEEDBURO official Grain Testing equipment has been manufactured since 1912 according to Government specifications. Only the finest materials are used and great care is taken in the manufacture of this equipment so that the highest possible degree of accuracy is assured. All items are guaranteed and we urge you to investigate this universal line before making purchases.

A large complete stock is always on hand which assures you immediate service.

If you will USE testing equipment, know what you buy and what you have to sell, profits are assured.

Complete Catalog upon request!

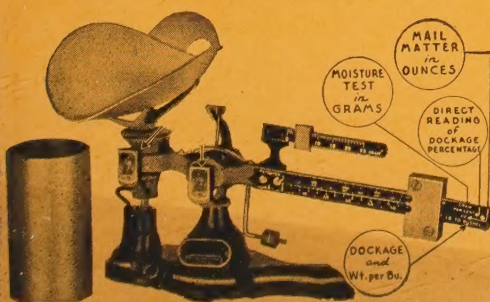
SEED TRADE REPORTING BUREAU

Phone Wabash 3712

223 W. JACKSON BLVD.

CHICAGO, ILLINOIS

PUBLISHERS OF SEED WORLD



Special "Four-in-One" Scale. Pint Measuring Cup included. Thousands in use.

Directory of the Grain Trade

In Organized Markets Only Members of the Local Grain Exchange Will Be Listed

HAVING YOUR name in this directory will introduce you to many old and new firms during the year, whom you do not know or could not meet in any other way. Many new concerns are looking for connections, seeking an outlet or an inlet, possibly in your territory. It is certain that they turn to this recognized Directory, and act upon the suggestions it gives them. The cost is only \$10 per year.

AMARILLO, TEXAS

Grain Exchange Members

Burrus Panhandle Elevators, public storage-mdsing.
Great West Mill & Elevator Co., millers, grain dealers.
Henneman Grain & Seed Co., seeds and grain.*
Kearns Grain & Seed Co., grain-field seeds.*
Stone, Lester, grain merchant.

BALTIMORE, MD.

Chamber of Commerce Members

Beer & Co., Inc., E. H., grain, hay, seeds.*

BUFFALO, N. Y.

Corn Exchange Members

American Elvtr. & Grain Div., recrs., shprs., consmts.*
Cargill, Incorporated, grain merchants.
McConnell, E. E., consignments, brokerage.*
Lewis Grain Corporation, consignments.
McKillen, Inc., J. G., consignments.
Provoost, S. E., grain and feed broker.*
Wood Grain Corp., consignments, brokerage.*

BURLINGTON, IOWA.

Member Chicago Board of Trade

Bartlett-Frazier Co., grain merchants.*

CAIRO, ILL.

Hastings Co., Samuel, receivers & shippers*

CEDAR RAPIDS, IOWA

Federal-North Iowa Grain Co., country run grain.*
Piper Grain & Mfg. Co., receivers and shippers.
Wildor Grain Co., grain merchants.*

CHICAGO, ILL.

Board of Trade Members

Bailey & Co., E. W., grain commission merchants.*
Bennett & Co., Jas. E., grain, provisions, stocks.*
Bartlett-Frazier Co., grain merchants.*
Dole & Co., J. H., recrs.-comm. mchts.*
Harris, Burrows & Hicks, grain & prov., futures.*
Holt & Co., Lowell, commission, grain and seeds.
Hulburt, Warren & Chandler, grain commission mchts.*
Lamson Bros. & Co., grain, stocks, provisions.*
Norris Grain Co., grain merchants.*
Quaker Oats Co., grain merchants.

CLEVELAND, OHIO

The Bailey Cain Co., shpr, grain, mill'd, oil, c.s meal*
The Cleveland Grain Co., home office.*

COLUMBUS, OHIO

Cummings & McAllister, brokers grain, feed, oil.*
Dill Grain Co., L. J., shippers grain-feed.

CINCINNATI, OHIO

The Early & Daniel Co., grain and feed service.*

DALLAS, TEXAS

Crouch Grain Co., J. O., buyers wheat, corn, oats.*

DECATUR, ILL.

Baldwin Elevator Co., grain merchants.*
Evans Elevator Co., grain, Chicago B. of T. Members.*
Hight Elevator Co., grain merchants.*
Livergood & Hight, consignments & futures solicited.*

DENVER, COLO.

Grain Exchange Members

Intermountain Elevator Co., recrs. shprs. consignmts.*

DETROIT, MICH.

International Grain Corp., grain merchants.

ENID, OKLA.

Board of Trade Members

Fouquay Grain Co., optrs. country elvtrs., gr. mdsng.*
General Grain Co., term. elvtr., gr. merchants.
E. H. Humphrey Grain Co., grain merchants.*
Johnston, W. B., wheat, coarse grains, field seeds.*
Salina Terminal Elvtr., optrs. Southwest Term. Elvtr.

*Members Grain & Feed Dealers National Assn.

FORT DODGE, IOWA

Bulpitt Grain Co., grain merchants.*

FORT WORTH, TEXAS

Grain and Cotton Exchange Members

Bennett & Co., Jas. E., grain, stocks, provisions.
Brackett Grain Co., brokerage, consignments.*
Carter Grain Co., C. M., brokerage and consignments.*
Davitt Grain & Feed Co., grain merchants.
Lone Star Elevators, public storage-merchandising.
Rogers Co., E. M., brokerage and consignments.*
Smith-Ingraham Grain Co., domestic-export grain.
Strader, Ralph, brokerage, consgnmts., merchants.
Transit Gr. & Comm. Co., consignments-brokerage.*

HUTCHINSON, KAN.

Farmers Co-Operative Comm. Co., grain storage.
Smoot Grain Co., oper. Grain Belt Elevator.*

INDIANAPOLIS, IND.

Board of Trade Members

Cleveland Grain Co., grain commission.*

JACKSON, MICH.

Gates, Harry D., wholesale hay and "Servall" litter.

KANSAS CITY, MO.

Board of Trade Members

Christopher & Co., B. C., cash and options.*
Davis-Noland-Merrill Grain Co., grain mchts.*
The Kansas Elevator Co., mlg. wheat, corn, oats, barley.*
Meservey-O'Sullivan Grain Co., gr. mchts. consgnmts.*
Moore-Seaver Grain Co., grain receivers.*
Secular-Bishop Grain Co., consignments.*
Simonds-Shields-Lonsdale Grain Co., grain merchants.*
Vanderslice-Lynds Co., Kahr, mltlo, consignments.*
Wolcott & Lincoln, Inc., consignments.*

LITTLE ROCK, ARK.

Farmer Co., E. L., grain & feed broker

LOS ANGELES, CALIF.

Member Chicago Board of Trade

Clyde Vedder & Co., broker, grain, provisions, stocks.

LOUISVILLE, KY.

Board of Trade Members

Zorn & Co., S., receivers and shippers.*

MEMPHIS, TENN.

Merchants Exchange Members

Ruxton, E. E., broker and commission merchant.*

MILWAUKEE, WIS.

Grain & Stock Exchange

Stratton Grain Co., grain merchants.*

MINNEAPOLIS, MINN.

Chamber of Commerce Members

Bunge Elevator Corp., grain merchants.
Cargill, Incorporated, milling wheat.*
Hallett & Carey Co., grain merchants.
Hiawatha Grain Co., screenings.*
McGuire Company, Arthur, shprs. b'wheat. m/wht.*
Scroggins Grain Co., grain merchants.*

OMAHA, NEBR.

Grain Exchange Members

Bartlett-Frazier Co., grain merchants.*
Bell-Trimble Co., recrs. and shippers.*
Udpike Grain Corp., receivers & shippers.*

PAXTON, ILL.

Watson Grain Co., corn & oats brokers.*

PEORIA, ILL.

Board of Trade Members

Bowen Grain Co., H. D., grain commission.*
Cole Grain Co., Geo. W., receivers and shippers.
Dewey & Sons, W. W., grain commission.*
Feltman Grain Co., C. H., grain commission.
Luke Grain Co., grain commission.*
Miles, P. B. & C. C., grain commission.*

PHILADELPHIA, PA.

Commercial Exchange Members

Markley, P. R., grain broker.*

PITTSBURGH, PA.

Members Grain and Hay Exchange

Rogers & Co., Geo. E., receivers, shippers.*

PONTIAC, ILL.

Balbach, Paul A., grain buyers, all markets.

ST. JOSEPH, MO.

Grain Exchange Members

Archer-Daniels-Midland Co., grain merchants.*
Bartlett-Frazier Co., grain merchants.*
Dannen Grain & Mfg. Co., grain mchts.-consignments.
Stratton Grain Co., grain merchants.*

ST. LOUIS, MO.

Merchants Exchange Members

Anheuser-Busch, Inc., feed grains.*
Ballard-Messmore Grain Co., consignments-futures.*
Fuller-Woolbridge Com. Co., gr. & millets all kinds.*
Jostes-Lusk Grain Co., grain merchants-consignments.*
Knowlton Grain Co., wide awake grain merchants.*
Langenberg Bros. Grain Co., grain commission.*
Morton & Co., grain commission.*
Mullally-Evans Co., everything in grain.*
Nanson Commission Co., grain commission.*
Schwarz Grain Co., grain dealers, consignments.*
Terminal Grain Co., grain, soybeans, consignments.*

SALINA, KANS.

Eberhardt-Simpson Grain Co., general mchts.*
Smoot Grain Co., oper. Salina Terminal Elevator.*

SAN ANTONIO, TEXAS

King Co., Douglass W., sorghums, corn, s/corn, cane sd.*

SIDNEY, OHIO

Wells Co., The J. E., wholesale grain.

SIOUX CITY, IOWA

Grain Exchange Members

Flanley Grain Co., also office at Omaha, Neb.*

TOLEDO, OHIO

De Vore & Co., H. W., consignments, futures, tr. buyers.
Rice Grain Co., "Oats Specialists."*
Southworth & Co., E. L., consignments, futures.

TOPEKA, KANSAS

Derby Grain Co., gen'l grain merchants.*

WELLINGTON, KANS.

Wolcott & Lincoln, Inc., optrs. Wellington Term. Elvtr

WICHITA, KANS.

Board of Trade Members

Adair-Morton Grain Co., wheat, corn, oats, barley.*
Craig Grain Co., wheat specialists, consignments.
Smith-McLinden Grain Co., wheat, corn, grains, feeds.
Wallingford Grain Corp., Sam P., grain and storage.
Wichita Terminal Elvtr. Co., gen'l elvtr. business.*

WINCHESTER, IND.

Goodrich Bros. Co., wholesale grain and seeds.*

Grain & Feed Journals Consolidated, a merger of Grain Dealers Journal (Est. 1898), American Elevator & Grain Trade (Est. 1882), Grain World (Est. 1928), and Price-Current-Grain Reporter (Est. 1884). Published on the 2nd and 4th Wednesday of each month in the interest of progressive wholesalers in grain, feed, and field seed. 332 South La Salle Street, Chicago, Illinois, U. S. A. Price \$2.00 per year, 25c per copy. Entered as second class matter November 27, 1930, at the Post Office at Chicago, Ill., under the act of March 3, 1879. Vol. LXXIX. No. 8. October 27, 1937.

Use Universal Grain Code and Reduce Your Telegraph Tolls

Board of Trade
Members**KANSAS CITY**Board of Trade
Members**SIMONDS - SHIELDS - LONSDALE GRAIN CO.
GRAIN MERCHANTS**

ELEVATOR CAPACITY, 7,000,000 BUSHELS

Frank A. Theis, President

E. F. Emmons, Vice President

F. L. Rosenbury, Secy.-Treas.

*A Service of 59 Years Handling Your Cash and Option Orders***B. C. CHRISTOPHER & COMPANY**

200-206 Board of Trade, KANSAS CITY, MO.

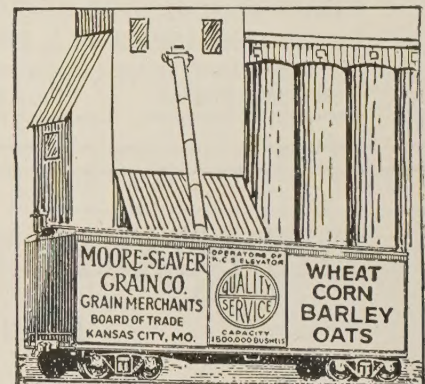
BRANCH OFFICES—Wichita, Hutchinson, Salina, Pratt, Belleville, Fort Scott, Emporia, Great Bend, Colby, Dodge City, Topeka, Atchinson, Kansas; St. Joseph, Springfield, Sedalia, Joplin, Mo.; Omaha, Nebr.

WOLCOTT & LINCOLN

Incorporated

801-810 Bd. of Trade, Kansas City
CONSIGNMENTS

Future orders executed in all markets.

Alton Elevator, Kansas City
Wellington Terminal Elev., Wellington, Kans.
Hutchinson, Kans. Salina, Kans.
Wichita, Kans. Dodge City, Kans.
Marysville, Kans. Wellington, Kans.
Hoisington, Kans. Enid, Okla.**WANT ADS**

in the GRAIN & FEED JOURNALS Consolidated make wants known to everyone connected with the grain trade. If you desire to buy or rent, sell or lease an elevator or anything used by grain dealers, try a want ad twice a month and your want will soon be satisfied.

Chamber of Commerce
Members**MINNEAPOLIS**Chamber of Commerce
Members**HALLET & CAREY CO.****Grain Merchants**

Minneapolis Duluth Winnipeg

Future TradingUpon Organized Commodity
Markets

by G. Wright Hoffman

Reviews the development and extent of future trading in the various commodities and markets; explains effect of future trading on price stabilization and operation of future markets. Cloth bound, 500 pages, price \$5.00, plus postage. Weight, 3 lbs.

Grain & Feed Journals
Consolidated

332 S. LaSalle St. Chicago, Ill.

When writing advertisers mention Grain & Feed Journals Consolidated. By so doing you help both yourself and the publication.

COAST TO COAST GRAIN SERVICE

CARGILLINCORPORATED
MINNEAPOLIS, MINN.
761 Chamber of CommerceCountry Offices
Fairmont, Minn.
Marshall, Minn.
Williston, No. Dak.
Crystal, No. Dak.
Sioux Falls, So. Dak.
Lincoln, Neb.Terminal Offices
Duluth, Milwaukee, Chicago, Green Bay, Cedar Rapids,
Toledo, Buffalo, Albany, New York, Boston, Omaha,
Memphis, Kansas City, St. Louis, Portland, Spokane,
Seattle, San Francisco, Winnipeg, Man.; Montreal, Que.

Cargill, Incorporated, Seed Division, Box 64, Minneapolis

WHEAT

AND ALL OTHER GRAINS

*Any Grade—Any Quantity—Any Time***BUNGE ELEVATOR CORPORATION**

MINNEAPOLIS, MINN.

Board of Trade
Members**CHICAGO**Board of Trade
Members**LAMSON BROS. & CO.**

2200 Board of Trade

Established 1874

Chicago, Ill.

*"63 years of continuous service in the grain trade."*GRAIN - STOCKS
BONDS - COTTON
BUTTER - EGGS
PROVISIONS**E. W. BAILEY & CO.**
COMMISSION MERCHANTS

GRAIN, SEEDS AND PROVISIONS

1142-44 Board of Trade, CHICAGO

— ESTABLISHED 1880 —
JAMES E. BENNETT & CO.**ASK FOR BIDS**
WHEAT—CORN—BARLEY
RYE—OATS—SOY BEANS

GRAIN COMMISSION MERCHANTS AND STOCK BROKERS—332 So. La Salle St., CHICAGO

MEMBERS ALL PRINCIPAL COMMODITY AND SECURITY EXCHANGES

CONSIGNMENTS AND FUTURES ORDERS SOLICITED IN ALL PRINCIPAL MARKETS

MINNEAPOLIS	ST. LOUIS	PEORIA	CAIRO	INDIANAPOLIS	KANSAS CITY
Chamber of Commerce	Merchants Exchange	Board of Trade	Board of Trade	Board of Trade	Board of Trade

THE QUAKER OATS COMPANY

BUYERS OF

Oats Corn Wheat BarleyCedar Rapids,
Ia.Ft. Dodge,
Ia.Akron,
OhioSt. Joseph,
Mo.

CHICAGO, ILLINOIS

**Safety
Sample Envelopes**

for mailing samples of grain, feed and seed. Made of heavy kraft paper, strong and durable; size, 4½x7 inches. Have a limited supply to sell at \$2.35 per hundred, 500, \$10.00 plus postage.

GRAIN & FEED JOURNALS
Consolidated
332 S. La Salle St., Chicago, Ill.**BARTLETT FRAZIER CO.**
GRAIN MERCHANTS

Receivers—Buyers—Shippers—Exporters

111 W. JACKSON ST., CHICAGO

CIPHER CODES

We carry the following cipher codes in stock:

Universal Grain Code, board cover	\$1.00
Robinson's Cipher Code, leather	2.50
Dowling's Grain Code	3.00
Miller's Code (1917), cloth	2.00
Cross Telegraphic Cipher (10th edition)	4.00
Peerless Export Grain Code	.85.00
A. B. C. Code, 5th Ed., with sup.	20.00
Baltimore, Export Cable Code	15.00
Bentley's Complete Phrase Code	10.00
Riverside Flour, Improved (6th Ed.)	12.50
Calpack Code (1923)	10.00

All prices are f. o. b. Chicago

GRAIN & FEED JOURNALS
Consolidated
332 S. La Salle St. Chicago, Ill.*Ship Your Grain or Seeds and Send Your Orders to***J. H. DOLE & COMPANY**

RECEIVERS and COMMISSION MERCHANTS

CHICAGO PEORIA ST. LOUIS

HARRIS, BURROWS & HICKS

135 South La Salle Street, CHICAGO

— ST. PAUL

MINNEAPOLIS

NEW YORK

Members Principal Stock and Grain Exchanges

We Specialize in Hedging and Spreading Operations

Board of Trade
Members**CHICAGO**Board of Trade
Members**HULBURD, WARREN & CHANDLER**

GRAIN COMMISSION MERCHANTS
208 South La Salle Street, Chicago
Arthur J. Pollak, Mgr., Cash Grain Dept.
Phone State 9760
Consignments Solicited—Bids "To-Arrive"
Ask for our Shipping Prices

E. F. HAVEY

COMMISSION MERCHANT
GRAIN and SEEDS

327 SOUTH LA SALLE STREET

CHICAGO

Corn Exchange
Members**BUFFALO**Corn Exchange
Members**Wood Grain Corp.****CONSIGNMENTS—BROKERAGE**

BUFFALO, N. Y.

American Elevator & Grain Division

Russell Miller Milling Company

RECEIVERS, SHIPPERS AND ELEVATOR OPERATORS

CONSIGNMENTS SOLICITED

Our System of Terminal Elevators, enables us to give prompt service and reliable quality
on coarse grains, durums and protein milling wheats.

There is no better time to advertise than the present. Better start before your competitor. Write the JOURNAL today.

Lewis Grain Corp.

A good firm to consign to
Corn—Oats—Soft Wheat—Barley
BUFFALO NEW YORK

J. G. McKILLEN, INC.

RECEIVERS

Consignments a Specialty
BUFFALO NEW YORK

RECEIVERS, SHIPPERS AND BROKERS**Geo. E. Rogers & Co.**

WABASH BUILDING, PITTSBURGH, PA.

RECEIVERS—SHIPPERS

GRAIN—HAY—MILLFEED—FLOUR

Nanson Commission Co.

Grain—Hay—Seeds

202 Merchants Exchange Bldg.
ST. LOUIS, MO.

Upon readers patronage of its
advertisers depends the success
of Grain & Feed Journals Consolidated. Mention it. Thank
you.

**Clark's Car Load
Grain Tables**

Eighth edition, extended to show bushels in largest carloads, shows the following range of reductions of pounds to bushels by fifty pound breaks.

20,000	to 129,950 lbs.	to bushels of 32 lbs.
20,000	" 74,950 "	" 34 "
20,000	" 118,950 "	" 48 "
20,000	" 140,950 "	" 56 "
20,000	" 140,950 "	" 60 "

Pounds in red ink; bushels in black, 48 pages. Linen ledger paper reinforced, bound in keratol with marginal index. Weight, 8 oz.

Price \$2.50 at Chicago

GRAIN & FEED JOURNALS
Consolidated

332 So. La Salle St., Chicago

E. H. BEER & CO., INC.

Successors to

Chas. England & Co., Inc.

GRAIN—HAY—SEEDS

Commission Merchants

308-310 Chamber of Commerce, Baltimore

RECEIVERS **GRAIN** SHIPPERS• **W. W. DEWEY & SONS** •

CONSIGN TO DEWEY

PEORIA**Grain & Feed Journals**

Consolidated

The paper the Grain and Feed
Dealer supports, because it sup-
ports the Grain and Feed Dealer.

**LANGENBERG BROS. GRAIN
COMPANY**

Established 1877

ST. LOUIS NEW ORLEANS

Intermountain Elevator Company

and FORT MORGAN MILLS, INC.

DENVER, COLORADO

Receivers, Shippers, and Elevator Operators

CONSIGNMENTS SOLICITED

Ample storage, constant stocks, and country connections enable us to give prompt,
efficient service, and dependable quality on coarse grains, and protein milling wheats.

**Use Universal Grain Code
and Reduce Your Telegraph Tolls**

GOOD LUBRICATION SAVES MONEY

ARE YOU RECEIVING FULL VALUE FOR
YOUR LUBRICATION DOLLAR?

Ask Your "Mill Mutual" Insurance Office for
a Lubrication Booklet, or Write to Us.

MUTUAL FIRE PREVENTION BUREAU

Department of

ASSOCIATION OF MILL AND ELEVATOR
MUTUAL INSURANCE COMPANIES

400 West Madison Street
Chicago, Illinois



VISIT *America's Most Modern Resort* THE **ELMS** HOTEL



The Elms is dedicated to your comfort and pleasure. Drink and bathe in the healing waters of this famous spa. Enjoy your favorite sport—golf, riding, tennis, hiking — all modern innovations, plus air-conditioned bedrooms. Rates including all meals as low as \$11. a day for two; \$6. a day single. Write for free booklet

Excelsior Springs
MISSOURI

IN MINNEAPOLIS Modern Travelers Prefer the HOTEL NICOLLET



● People who are going places prefer a modern hotel. That's why so many are choosing the Nicollet. It's the biggest hotel value, with 600 outside rooms priced as low as \$3. Four modern restaurants. Drive-in garage connects with hotel.

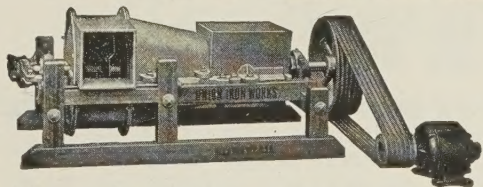
HOTEL NICOLLET

MINNEAPOLIS ● NEIL R. MESSICK, *Manager*
600 rooms . . . minimum rate with bath \$3
National Hotel Management Company, Inc.
RALPH HITZ, *President*



WESTERN

— GRAIN ELEVATOR EQUIPMENT —

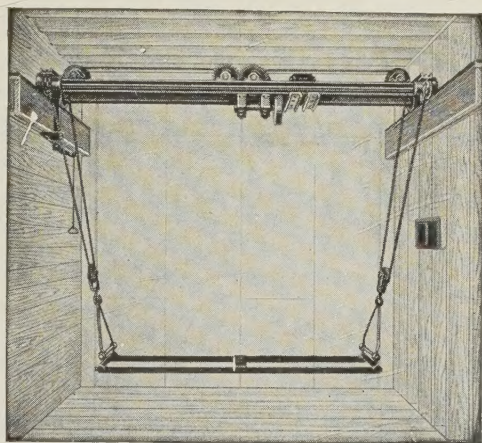
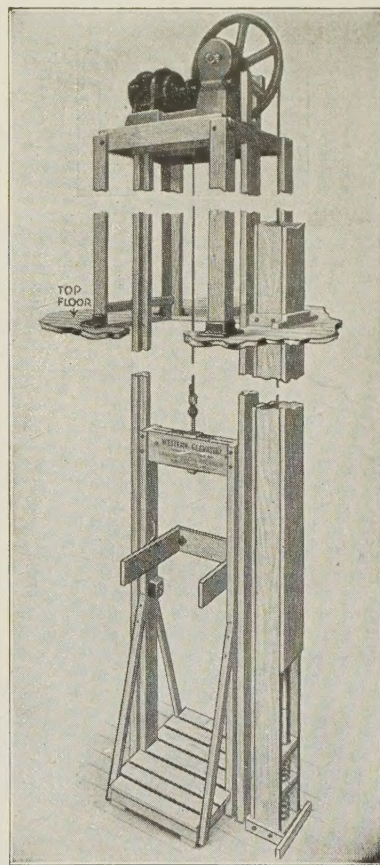


Western Pitless Sheller with Cog Belt Drive

NEW

The ELECTRIC MANLIFT takes its place alongside our Electric Truck Hoist and Motor Driven Corn Sheller.

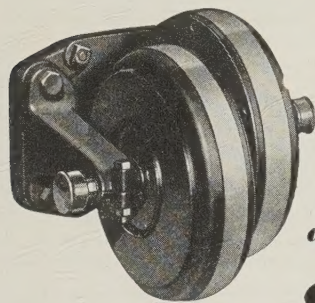
Write us for complete information and prices.



Overhead Electric Truck Dump

UNION IRON WORKS

DECATUR,
ILLINOIS



a "magic" force

compels EVERY SCREEN

TO DO 15 TO 25% more cleaning

Can you conceive a power, action or force that would make your present screens handle 15 to 25% more cleaning—give more uniform separations—reduce your screen losses? 3500 users **know** it can be done—**they are doing it**—their cleaning has been revolutionized by this "miracle" of completely troubleless screen agitation—this frictionless, wearless "Eureka" **Eccentricless** drive that intensifies screen hole action—to the greatest capacity and the truest separations grain cleaning has ever known. Catalog 1590 tells it all. Ask for a copy.

S. HOWES CO., Silver Creek, N. Y.

eccentricless

**"Magic Screen"
CLEANERS**



GRAIN ELEVATOR BUILDERS

HORNER & WYATT
*Engineers*Designers of Grain Elevators
and Feed Mills

Power Problems a Specialty

470 BOARD OF TRADE KANSAS CITY, MO.

Z E L E N Y
Thermometer System*Protects Your Grain*Estimates cheerfully given.
Write us for catalog No. 6.**Zeleny Thermometer Co.**

542 S. DEARBORN ST.

CHICAGO, ILL.

**Santa Fe Elevator "A"**

Kansas City, Kans.

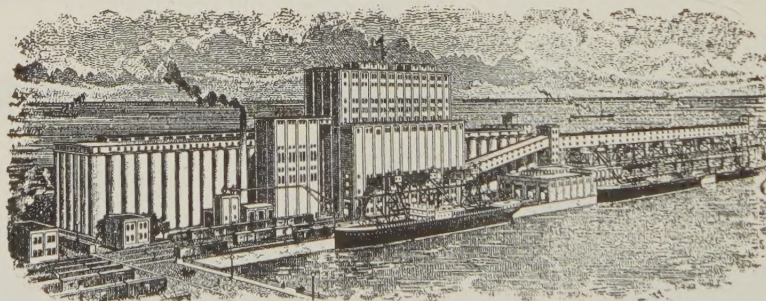
Capacity
10,500,000 Bushels**JOHN S. METCALF CO.***Grain Elevator Engineers and Constructors*

105 W. Adams St., Chicago

460 St. Helen St., Montreal

837 W. Hastings St., Vancouver, B. C.

12-15 Dartmouth Street, London, England

Capacity
5,000,000
Bushels*Equipped with
Four Stewart
Link-Belt
Grain Car
Unloaders*

PENNSYLVANIA RAILROAD ELEVATOR AT BALTIMORE

JAMES STEWART CORPORATION

ENGINEERS AND CONTRACTORS

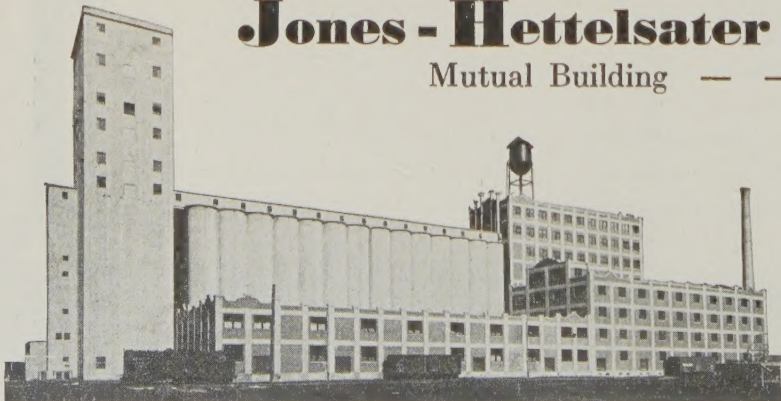
FISHER BUILDING—343 S. DEARBORN ST., CHICAGO, ILLINOIS

H. G. ONSTAD
PRES.-GEN MGR.
Phone Harrison 8884L. V. HEUSER
VICE-PRES.**Jones - Hettelsater Construction Co.**

Mutual Building — — Kansas City, Mo.

*Designers and Builders***Grain Elevators
Feed and Flour Mills**Pillsbury Flour Mills Co.
Springfield, Ill.

1,000,000 bus. Elevator

8 Story Flour Mill — 4 Story Cereal Mill
2 Story Warehouse*designed and constructed by us under a
single contract.*

GRAIN ELEVATOR BUILDERS

The Barnett & Record Company

DESIGNERS

BUILDERS

Grain Elevators

MINNEAPOLIS, MINN.

Mill Buildings

Industrial Plants

MACDONALD ENGINEERING CO.

Grain Elevators—1895 to Today

San Francisco

One North La Salle Street, Chicago

Toronto

WE SPECIALIZE

In Building or Modernizing Country Elevators

VAN NESS CONSTRUCTION CO.

Grain Exchange

OMAHA, NEBR.

A. Clemans Constructiuo Co.

SOUTH SOLON, OHIO

Designers and Builders

Concrete Grain Elevators, Coal Pockets,
Feed Mills**EIKENBERRY****CONSTRUCTION CO.**

BLOOMINGTON, ILL.

WE BUILD

GRAIN STORAGEES

29 Years' Experience

Send us your inquiries

POLK GENUNG POLK COMPANY

Fort Branch, Indiana

HOGENSON

Construction Co.

Designers and Builders

Elevators, Feed Mills, Warehouses
REMODELING

Corn Exchange Bldg.

MINNEAPOLIS, MINN

T.E. IBBERSON CO.**GRAIN ELEVATOR BUILDERS**

Feed Mills

Coal Plants

Repairing and Remodeling

MINNEAPOLIS

MINNESOTA

GEORGE W. VASOLD

Designer and Builder

Bean and Grain Elevators
Feed Mills and Warehouses
35 years construction experience
FREELAND, MICHIGAN.

I have been a subscriber to your publication for many years and have received many valuable suggestions as well as some good advice.—Judson Co., by R. V. Judson, Detroit, Mich.

YOUR ELEVATOR

can be brought up-to-date for less than it is costing you to operate it. Ask for our recommendations and estimates on modernizing your plant.

Reliance Construction Co.

Board of Trade

Indianapolis, Ind.

Say you saw it in the

Journal

When you write our advertisers

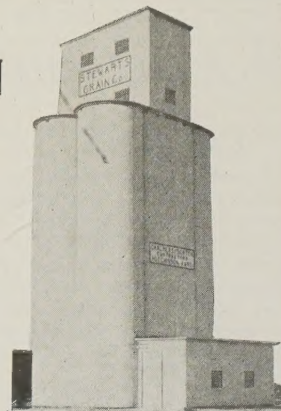
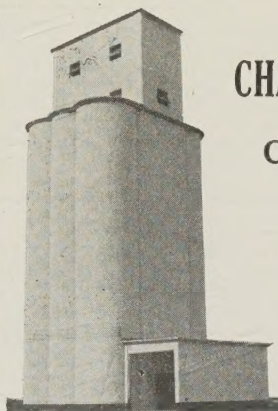
Thanks

CHALMERS & BORTON

CONTRACTORS

AND

ENGINEERS

HUTCHINSON,
KANSAS

Coal Sales Book For Retail Coal Dealers

It facilitates bookkeeping, and reduces the chance for error. Practically three books in one: 1. Original entry of all sales made. 2. Original entry of the scale weights. 3. Journal from which the posting is done.

It contains spaces for 10,000 truck loads. Each page is ruled with column headings, as follows: Date, Ledger Folio, Buyer, Driver, Gross, Tare, Net, Kind, Price, Amount, Cash, Charge.

This book is 10½x15¼ inches and contains 200 numbered pages of linen ledger paper. Well bound with black cloth, and red keratol back and corners. Weight, 4 lbs.

Order Form 44 Improved. Price, \$4.00 at Chicago.

Grain & Feed Journals

Consolidated

332 So. La Salle St., Chicago, Ill.

DAY Dust Control System

Will Solve Your
Dust Problem

—EFFICIENTLY
—EFFECTIVELY

Consult Us. No Obligation.

The Day Company

2938 Pillsbury Ave.

Minneapolis, Minn.

Wanted and For Sale

The rate for advertisements in this department is 25 cents per type line, each insertion

ELEVATORS FOR SALE

FOR SALE elevator and coal shed on Rock Island Ry. 17 miles south of Spencer, Iowa. W. A. Gowen, Webb, Iowa.

WOULD YOU BUY Oklahoma elevator if two years' profits pay for it? Can show you. 79U11, Grain & Feed Journals, Chicago.

NORTHWEST ILLINOIS elevator for sale—10,000 bu. cribbed, handling 150,000 to 250,000 annually; electrically equipped; only plant within 5½ miles; also good two story dwelling, modern in every way; the two priced at only \$7500 for quick sale, to settle estate. Rinehart-Swartz Agency, Monticello, Ill.

THRIVING ILLINOIS BUSINESS FOR SALE AT BARGAIN

Located in one of the best farming counties in the world, village has one of best banks in northern Illinois, consists of a large grain elevator with 14 bins; well equipped for sorting and mixing grains; equipment includes IHC engine; Fairbanks scale; portable platform scale and other necessary machinery; a 24x32 addition for seed, hardware, millwork and one 24x28 containing engine room, feed and salt storage adjoin; attached is a modern office; corn crib; sand bin; 3 enclosed frame warehouses containing lumber, fence, roofing, pump repairs and workroom; 18x38 barn; 20x80 coal shed; open side lumber shed 20x109. Total reproduction cost exceeds \$22,000. All buildings in sound physical condition.

We own all real estate, consisting of 8 city lots. Stock consists of lumber, coal, feed, seed, salt, some staple hardware items, nails and similar merchandise for farming communities. We have operated 24 years. Manager is popular; one friendly competitor.

Entire property can be had for only a fraction of replacement value. The right spot for a hustler. Write 79R1, Grain & Feed Journals, Chicago, Ill., for additional information.

ELEVATORS FOR SALE

EASTERN ILLINOIS—50,000 bu. elevator, coal and lumber business; ill health reason for selling; inquire of W. W. Boughton, Chenoa, Illinois.

NORTHERN ILLINOIS—Grain elevator and feed mill; well equipped; in good condition; good location; town of 1,900. Address P. O. Box 309, Amboy, Ill.

INDIANA—Two elevators for sale; in town of 1600; 35,000 bu. cap.; grain, feed, coal, seed and grinding; electric. Sugar Creek Grain Co., Thorntown, Ind.

ALWAYS HAVE GRAIN ELEVATORS for sale. If you are in the market write me fully as to amount you wish to invest and location desired. James M. Maguire, 6440 Minerva Ave., Chicago, Ill.

MONTANA—14 tank steel elevator, fully equipped; 2 Fairbanks Hopper Scales; manlift; receiving separator; Nurdyke feed roll; pneumatic truck lift; 40 hp Fairbanks-Morse motor; reasonable rates and ready to go on this crop; location Gallatin Valley; best buy in state. Address 79P11, Grain & Feed Journals, Chicago, Ill.

SOUTHERN PENNSYLVANIA—One of the finest, most economically operated grain elevator and coal trestle in state for sale; excellent condition; built 1922; good thrifty community; good schools. \$20,000 half mortgage, if necessary might consider renting; wish to retire on account of health. P. O. Box 500, Harrisburg, Pa.

THE WANTED-FOR SALE DEPARTMENT of GRAIN & FEED JOURNALS is a market place where buyer and seller, employer and employee, and those offering investments can meet to their mutual advantage and profit and it will pay every subscriber to give these columns a close study twice each month, because of the constantly changing variety of opportunities seeking your consideration.

SAMPLE ENVELOPES

SAMPLE ENVELOPES—SPEAR SAFETY—for mailing samples of grain, feed and seed. Made of heavy kraft paper, strong and durable; size 4½x7 inches. Have limited supply to sell at \$2.35 per hundred, or 500, \$10.00 plus postage. Sample mailed on request. Grain & Feed Journals, 332 S. La Salle St., Chicago, Ill.

FEED MILL AND ELEVATOR WANTED

WANTED—Elevator and feed mill in Ohio priced right for cash. Address 79U6, Grain & Feed Journals, Chicago.

FEED MILL FOR SALE

TOLEDO, OHIO—Feed mill in good operating condition; best of railroad facilities, centrally located. Imperial Grain & Milling Co., Toledo, Ohio.

EASTERN PENNSYLVANIA—Feed manufacturing plant; modern throughout; thoroughly equipped, reasonable capacity, best shipping and transit facilities; going concern, long established; exceptional proposition and value. Address 79V4, Grain & Feed Journals, Chicago.

VIRGINIA—Feed mill for sale, reasonable capacity, dry and sweet feeds; thoroughly equipped; electrically operated; own building, land, R. R. siding; only feed mill at this point; exceptional bargain to settle estate. Southern Feed Co., Newport News, Va.

BUSINESS OPPORTUNITIES

ADRIAN, MICHIGAN—Property of the former Detroit Milling Co. located on the M. C. R. R.; main elevator building contains four storage bins and some machinery, also four large concrete storage tanks with overhead and underground conveyor system; storage capacity approximately 75,000 bu. In order to close an estate the land, buildings and tanks may be purchased for \$7500.00. For further information, write D. M. Schneider, Adm. 413-12th St., Toledo, Ohio.

NORTH CENTRAL OHIO: Will sacrifice for quick cash sale of my feed, seeds, coal, ice and gasoline retail business. Twenty years going concern, completely equipped. Established clientele. Own real estate, buildings, coal silos and equipment. Railroad switch located on N. Y. C. line and Main Street of prosperous town of 4,000 population. Ample ground space for expansion in all lines now carried. Reason for selling: Have opportunity to acquire business in Western State and want cash. Address 79T4, Grain & Feed Journals, Chicago.

SITUATION WANTED

WANTED—Position as manager country elevator; 15 years' experience in coal, feed, oil, other mdse.; good references, available at once. William J. Dixon, LeRoy, Ill.

IF YOU NEED the services of a young man of 27 with 7 years' successful experience in the grain business you need look no further. Will be pleased to go into detail with employer. Address 79T2, Grain & Feed Journals, Chicago.

WANTED position as grain solicitor, have solicited Iowa shippers; also have Iowa brokerage office experience; family connections at 3 Iowa stations; references. Business assured, age 38, married, good sales personality, have '37 Ford. Walter J. Lamis, 5056 Addison St., Chicago, Ill.

OPPORTUNITY—Your chance to secure the services thoroughly experienced COUNTRY ELEVATOR MANAGER—capable of making your elevator pay—grain, coal, lumber; will come for an interview; excel. ref. and record. Write 79V8, Grain & Feed Journals, Chicago.

WHENEVER THERE is a real opportunity of interest to the grain trade, it is usually registered in the "Wanted—For Sale" columns of the Journal.

KEEP POSTED

**GRAIN
& FEED JOURNALS**
CONSOLIDATED

332 So. La Salle St., Chicago

A merger of Grain Dealers Journal, American Elevator & Grain Trade, Grain World and Price Current-Grain Reporter.

Gentlemen:—In order to keep us posted regarding what is going on in the grain and feed trades outside our office, please send us the *Grain & Feed Journals* twice each month. Enclosed find Two Dollars for one year.

Name of Firm.....

Capacity of Elevator

Post Office

State

HELP WANTED INVESTMENT

WANTED—Successful elevator manager, to take management, with interest in two good paying stations, in Central Illinois; large capital not essential; splendid opportunity for right man, not over 40. Address 79V2, Grain & Feed Journals, Chicago, Ill.

MACHINES FOR SALE— WANTED

FOR SALE—All kinds of good used machinery, also new machinery; want to buy good used machines. T. A. McWilliams, 115 E. St. Catherine St., Louisville, Ky.

MOTORS—GENERATORS ELECTRICAL MACHINERY

Large stock of motors and generators, A.C. and D.C., new and rebuilt, at attractive prices. Special bargains in hammermill motors, 25 to 100 H.P., 1200 to 3600 R.P.M. Write for stock list and prices. Expert repair service. V. M. NUSSBAUM & CO., Fort Wayne, Indiana.

BARGAIN IF TAKEN AT ONCE—Some one is always looking for an elevator at a good grain point and reads these ads just like you're doing now, so if you wish to dispose of your present property, enlarge your present interests, or embark in the grain business, USE these columns to your best advantage just as others are doing. WE WILL assist you in the composition of copy free. We are in business to be of service to YOU. There is no wrong time to put an ad in the columns of the Journal. TRY IT.

Statement of the Ownership, Management, Circulation, Etc., Required by the Act of Congress of August 24, 1912.

of Grain & Feed Journals Consolidated, published semi-monthly at Chicago, Ill., for October 1, 1937.

State of Illinois, County of Cook, ss.—Before me, a notary public in and for the state and county aforesaid, personally appeared Charles S. Clark, who having been duly sworn according to law, deposes and says that he is the business manager of the Grain & Feed Journals Consolidated, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse of this form, to-wit:

1. That the names and addresses of the publisher, editor, managing editor, and business manager are:
Publisher, Grain & Feed Journals Consolidated, Inc., Chicago, Ill.

Editor, R. R. Rossing, Chicago, Ill.

Managing Editor, Charles S. Clark.

Business Manager, Charles S. Clark, Chicago, Ill.
2. That the owners are: (Give names and addresses of individual owners, or, if a corporation, give its name and the names and addresses of stockholders owning or holding 1 per cent or more of the total amount of stock):

Grain & Feed Journals Consolidated, Inc., 332 S. La Salle St., Chicago, Ill.

Charles S. Clark, 332 South La Salle St., Chicago.

3. That the known bondholders, mortgagees, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages or other securities are: (If there are none, so state.)—None.

4. That the two paragraphs next above giving the names of the owners, stockholders and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company, but also, in cases where the stockholders or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is....(This information is required from daily publications only.)

CHARLES S. CLARK,
Business Manager.

Sworn to and subscribed before me this 16th day of October, 1937.

KATHERINE A. LYON,
Notary Public.

(Seal)
(My commission expires October 17, 1939.)

MACHINES FOR SALE

CORN CUTTER & Grader—has motor—used very little. 79N12, Grain & Feed Jnls., Chicago.

SHELLER & CLEANER—Truck dump, 12-in. Elevator buckets. W. W. Pearson, Reynolds, Ind.

FEED MIXER—one ton—floor level feed—has motor—good as new. Write 79N14, Grain & Feed Journals, Chicago, Ill.

HAMMER MILL with 25-h.p. motor and all attachments. Priced to sell. Write 79N13, Grain & Feed Journals, Chicago, Ill.

FEED MIXER for sale, has motor, and a late machine. Need space. Will sacrifice. Write 79N15, Grain & Feed Journals, Chicago, Ill.

FOR SALE—McCormick-Deering Number 1 Corn Sheller, with Fourteen foot Shelled corn elevator, ready to shell corn; price \$200.00. Ralph Carson, Charleston, Mo.

FOR SALE—Second hand feed and elevator machinery; Tag-Heppenstall Moisture Meters; Bolinder Diesel Engines. Weaver Sales Corp., Corn Exchange, Minneapolis, Minn.

OIL ENGINES—10 hp and 25 hp Fairbanks-Morse; 10 hp gas engine, A-1 condition, priced to sell; large stock AC and DC motors, generators, compressors, etc.; send for complete stock list, Bulletin No. 55. Rockford Electric Equipment Co., 728 South Wyman Street, Rockford, Illinois.

GRUENDLER Hammer Mill, large size No. 3, like new; Noye, 3 pair high roller mill completely rebuilt, rolls, caliper 8 $\frac{1}{2}$ " and higher, a real mill; Eureka 3-in-1 feed mixer; McMillin molasses mixer. Good used shafting, bearings, conveyors and magnetic separators. Cliff Buzick, Bardstown, Ky.

ELEVATOR MACHINERY—Razing 30,000 bu. Elevator; have Monarch 75 hp steam engine with Boiler, new McCormick-Deering 20 hp power unit, new Two 80 foot legs complete with 16" belt, 14" cups, Head pulley 48" D.17" face, Barnard & Leas corn cleaner, Barnard & Leas Rec. sep., 70 foot manlift, Car puller, Air dump, 10 ton Howe scale, Steel spouting, Pulleys, clutches, boxing, etc.; this machinery all in No. 1 condition; 30,000 lb. hopper scale. S. G. Trent, White Cloud, Kans.

MACHINERY BARGAINS

Complete Feed Mill Outfit; Several Clipper Cleaners; Grundler Batch Mixer; Vertical Batch Mixer (new); Several Water Wheels; No. 6 Invincible Cleaner; several other Cleaners; Big Chief Hammer Mill; Gruendler, JB & other Hammer Mills; 6 bu. Fairbanks Automatic Scale; $\frac{1}{2}$ bu. Richardson Scale; Attrition Mills all makes & sizes, motor & belt driven; Corn Cutter & Grader (new); Corn Shellers new & used; Cob Crushers; Duplex Corn Cracker & Grader; 25 & 60 bbl. Midget Mills; Crippen Bean Picker; few large Pulleys. Everything for the Feed Mill & Elevator. A. D. Hughes Co., Wayland, Michigan.

MACHINES WANTED

WANTED—GRAIN DRIER, steam, two hundred bushels or over. Owensboro Milling Co., Owensboro, Ky.

WANTED to buy—A vertical mixer with motor attached, with gravity feed and hopper flush with floor. Consolidated Grain Corporation, Bay City, Mich.

STOP! READ! THINK! One advertiser writes, "Your service brought me 24 replies." We can do the same for you. Don't wait, write now.

SCALES FOR SALE

MOTOR TRUCK SCALES. Bargains. All capacities. Used scales. Shipped on 30 day free trial. Bonded Scale Co., manufacturers, Dept. GFJ, Columbus, Ohio.

McMILLIN TRUCK DUMP

For Electrical Power



A dump that fills all requirements. Capacity from smallest wagon to largest truck. Dumps from any length vehicle into one dump door. By adding extension will dump into any number of doors. Operating connections at each door. Can be installed in almost any driveway. Installation simple and very reasonable. All parts of dump in plain view above driveway floor. Vehicles can be raised to any angle for dumping. Can be stopped and started as desired. Under complete control. All-steel power unit completely assembled. Substantially constructed. No delicate parts. **SPEEDY, SAFE and SIMPLE** in operation.

Address

L. J. McMILLIN

525 Board of Trade Bldg., Indianapolis, Indiana

Railroad Claim Books

require little of your time for filing, and contain spaces for all the necessary information in the order which assure prompt attention on the part of the claim agent. They increase and hasten your return by helping you to prove your claims and by helping the claim agent to justify payment.

A is for Loss of Weight in Transit Claims.
B—Loss in Market Value Due to Delay in Transit.

C—Loss in Quality Due to Delay in Transit.
D—Loss in Market Value Due to Delay in Furnishing Cars.

E—Overcharge in Freight or Weight.

These claim blanks are printed on bond paper, bound in book form, each book containing 100 originals and 100 duplicates, a two-page index, instructions and summary showing just which claims have not been paid, and four sheets of carbon.

The five forms are well bound in three books, as follows:

411-A contains 100 sets all Form A. Price, \$2.00. Weight 3 lbs.

411-E contains 100 sets all Form E. Price, \$2.00.

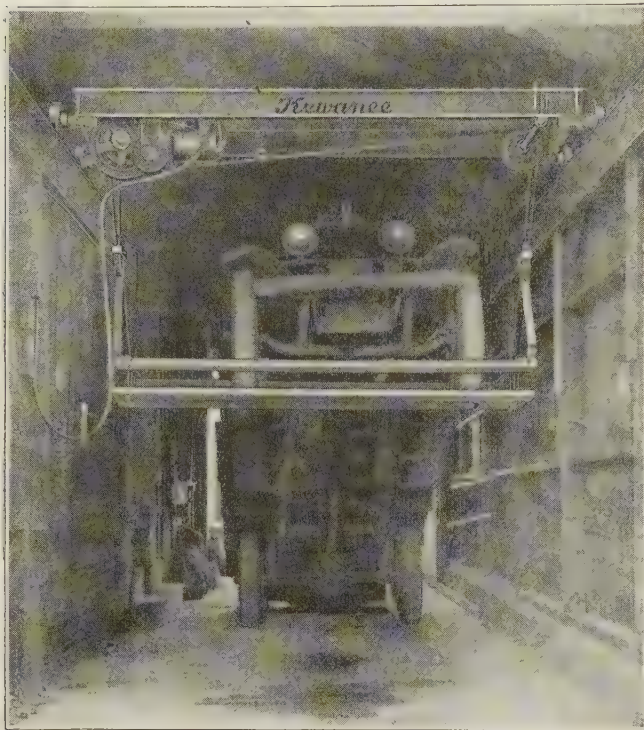
411-5 contains 60 sets Form A, 10 Form B, 10 Form C, 10 Form D and 10 Form E. Price, \$2.00.

Grain & Feed Journals

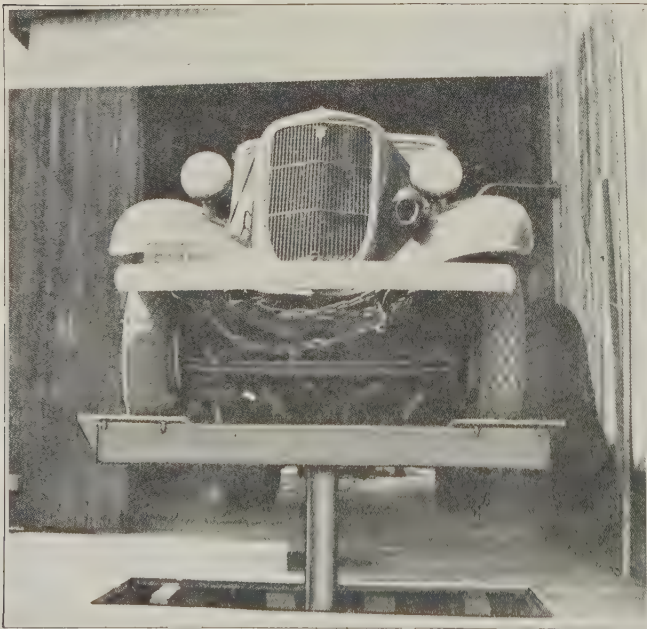
CONSOLIDATED

332 South La Salle St. Chicago, Ill.

Kewanee Roller Bearing Overhead Crane Lift



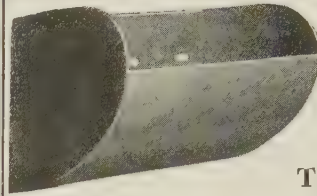
equipped with $\frac{1}{2}$ -inch Cable, 8-inch Grooved Drum, 8-inch Sheaves and operated with a 3 H. P. Geared-Head Motor. Lifting speed 6 ft. in 30 seconds.



**KEWANEE FRAMELESS CYLINDER AIR
LIFT FOR DUMPING LONG TRUCKS**

Raises the wheels 7' 6".

Kewanee Machinery & Conveyor Co.
KEWANEE, ILL.



THE
CALUMET

(Protected by U. S. & Foreign Patents)

is a highly specialized elevator bucket and to get maximum results with greatly increased capacity, there is necessarily some engineering advice required as to proper application. We are the ones to give it to you. Our regular dealers are also trained in this. If you are not in touch with one of these dealers, a letter to us will put you straight.

We have no licensed manufacturers, and all who represent themselves as such are infringing our patent rights.

B. I. WELLER

Sole Manufacturer

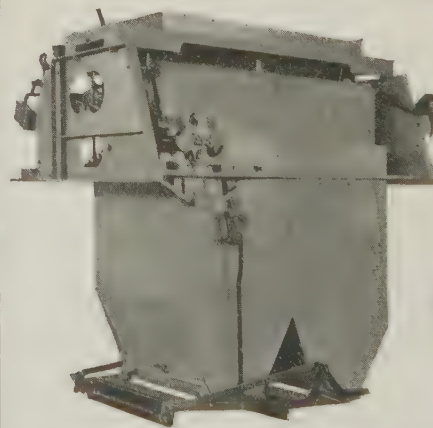
704 Hoffman St.,
Hammond, Ind.

327 S. La Salle St.,
Chicago, Ill.

GRAIN SHIPPERS!

GREATER CAPACITY—

GREATER PROFIT



Load your
cars in *half*
the time —
Double the
number of
cars you load

THUS—
MORE THAN
DOUBLE
YOUR
PROFITS

RICHARDSON ALL-AUTOMATIC

25-BUS. GRAIN SCALE

4,000 BUSHEL PER HOUR

ACCURATELY WEIGHED

Richardson Scale Company

Factory: Clifton, N. J.

37 W. Van Buren St., Chicago, Illinois
Minneapolis, Minn. Omaha, Nebr. Wichita, Kansas
580 Market St., San Francisco, Calif.

GRAIN & FEED JOURNALS

CONSOLIDATED
INCORPORATED

332 S. La Salle St., Chicago, Ill., U.S.A.
Charles S. Clark, Manager

A merger of
GRAIN DEALERS JOURNAL
Established 1898

AMERICAN ELEVATOR &
GRAIN TRADE
Established 1882

THE GRAIN WORLD
Established 1898

PRICE CURRENT - GRAIN REPORTER
Established 1844

Published on the second and fourth Wednesdays of each month in the interests of better business methods for progressive wholesale dealers in grain, feed and field seeds. It is the champion of improved mechanical equipment for facilitating and expediting the handling, grinding and improving of grain, feeds and seeds.

SUBSCRIPTION RATES to United States, Canada and countries within the 8th Postal Zone, semi-monthly, one year, cash with order, \$2.00; single copy current issue, 25c.

To Foreign Countries, prepaid, one year, \$3.00.

THE ADVERTISING value of the Grain & Feed Journals Consolidated as a medium for reaching progressive grain, feed and field seed dealers and elevator operators is unquestioned.

Advertisements of meritorious grain elevator and feed grinding machinery and of responsible firms who seek to serve grain, feed and field seed dealers are solicited. We will not knowingly permit our pages to be used by irresponsible firms for advertising a fake or a swindle.

LETTERS on subjects of interest to those engaged in the grain, feed and field seed trades, news items, reports on crops, grain movements, new grain firms, new grain elevators, contemplated improvements, grain receipts, shipments, and cars leaking grain in transit, are always welcome. Let us hear from you.

QUERIES for grain trade information not found in the Journal are invited. The service is free.

CHICAGO, ILL., OCTOBER 27, 1937

MALTSTERS will not bid for shippers' barley unless the dirt and thin kernels have been removed. A good cleaner will earn its cost in a short time.

PLAYING CHECKERS with the lady friend of a customer while patron loads and weighs his truck, in the estimation of one Illinois manager of long experience, is not always profitable practice.

A WELL-COOPERED car does not scatter shipper's grain all along the carrier's right-of-way. It is much cheaper and pleasanter to coöper cars properly than to spend time trying to induce carriers to pay for grain lost in transit.

BUYING power of the public is more influential than even the government in making a market. Anyone doubting may look at the prices of pork in 1925 and 1926 when the supply was large and the meat sold at 5 to 10 cents per pound higher than during the present government and drouth-made scarcity. The public buying power fell in 1930 and hogs dropped to \$3.

BUSINESS CHANGES reported in news columns of the Journal and used to correct mailing lists will save the terminal grain merchant much postage.

IF THE champions of crop insurance would turn their attention to the weather and supply sunshine and rain as the crops need it, the farmers would be much better satisfied. Few American farmers care to depend upon a Government dole for existence.

OBSERVING grain merchants everywhere are thoroly convinced of the helpfulness of the Assn's working to defend and promote the various interests of the trade, yet for some inexplicable reason many hang back and hesitate to give their trade organizations the active support they fully merit.

WHILE other industries have been constantly advancing their prices since the bottom of the depression the average revenue of the railroads has continued declining until it is now only 9.36 mills per ton per mile, the lowest for 19 years. Obviously the carriers can not sustain new burdens such as the proposed split train bill would impose.

RAILROAD freight conductors who received \$1.01 per hour in the flush times of 1929, received \$1.17 per hour in 1936, and yet the five railway operating brotherhoods were recently given an increase of 44 cents per day. Thru freight engineers received \$1.23, and in 1936 \$1.39 per hour, as shown by statistics of the Interstate Commerce Commission. Is it surprising that highway motor trucks are taking traffic from the railroads?

SHIPPERS must keep in mind that the rate of freight quoted by station agent is not always the lawful rate filed with the I.C.C.. One Oklahoma shipper was quoted a rate of 11 cents, but was charged 34 cents per hundred, so it brot suit against the R. I. R.R. for \$24,403. While railroad freight agents generally quote the lawful rate, like every other citizen, they occasionally err, but the federal law will not permit them to favor anyone in the matter of freight rates.

THE RAILROADS were coerced recently into granting material increases in the wages of workers, so in order to reduce their expenditures in keeping with their shrunken revenues, they have laid off over 25,000 employees. Hence, shippers will be offered inferior and broken cars for the transportation of their grain. This will call for greater vigilance in inspecting cars tendered for the loading of grain, and greater care in coöpering every car before loading; otherwise, losses in transit are bound to exceed all expectations. A bad order car is not capable of transporting grain to any destination. Why entrust it with so valuable a load!

SPECULATORS in cold storage eggs who stood to lose by the drop in the market price of refrigerator eggs were aided during October by the Federal Surplus Commodities Corporation's buying of hundreds of carloads of eggs to halt the decline. If the purchase were solely of fresh eggs of the farmer the government's solicitude might be understood.

DISMISSAL by the Supreme Court of the last of the several suits to have the regulation of exchanges declared unconstitutional should drive the merchants to devise some way of trading not burdened with regulation and taxation. One way out would be to discontinue trading in futures, substituting the purchase and sale of cash wheat in the pit and the daily delivery of warehouse certificates on contracts, much as stock certificates are delivered daily on the stock exchange.

THE DECREASE in the open interest in wheat futures on the Chicago Board of Trade from the top of 141,000,000 Aug. 19 to the low of 106,700,000 bus. Oct. 19 deprives the anti-futures agitators of their argument that the drop of 20 cents per bushel during that time was due to short selling. Simply, those who were long sold out. Nearly 5,000,000 bus. was sold out on Oct. 13 when December and May futures hit bottom at 93 cents. The open interest is now less than the number of bushels of wheat in the visible supply.

DRY ICE in carloads of corn is the newest idea. The credit for this innovation goes to an Iowa shipper who placed 500 pounds of the refrigerant on a shelf on one end of the car and a like amount at the other end. The corn arrived at Kansas City two days later cool and sweet with 21.6 per cent moisture. After inspection and before arrival at the elevator the contents began heating. Two other cars shipped at the same time without dry ice were heating before inspection. Evidently this method of keeping high moisture corn from heating in transit is worthy of further study.

ELEVATOR operators carrying side lines are cautioned to investigate alleged poultry remedies before stocking them on their shelves. The manufacturers can not be prosecuted for false claims made over the radio or in other advertising matter. Such unwarranted puffery should be disregarded and the dealer's attention focused on the label on the container of the remedy. Any unwarranted claims directly on the label subject the maker to prosecution under the Food and Drugs Act. Knowing this the compounder is careful to avoid exaggerated claims on the label. Numerous frauds have been perpetrated in the past by claiming remedies for serious poultry diseases for which there is no effective drug treatment.

Wishful Thinking on Farm Aid

Everybody will agree with the President in his letters of Oct. 23 to the chairmen of the senate and house agricultural committees that it is highly desirable that farmers' income and soil fertility should both be conserved; that farmers and consumers should be protected against extreme ups and downs in prices of farm products; that loans on crops should not pile up unmanageable supplies.

His criticism of the Federal Farm Board's method of holding the wheat surplus off the market also will meet approval by the public and the trade.

With regard to the ever normal granary, which is but a modification of the Federal Farm Board holding plans, it is evident the President has listened to bad advice. Unfortunately this also is a case where hindsight will prove better than foresight, since it can not be proved in advance that the benefits to grower and consumer of surplus storage by government will be infinitesimal compared with the excessive costs of storage and administration over a long period of years.

England never grows enough wheat for home consumption; but by importing from all parts of the globe supplies every deficiency, and so could the United States, as has been proved during the past few years when we imported both wheat and corn over the stiff duty of 42 cents on wheat and 25 cents on corn per bushel. As wheat is harvested in some part of the world every month of the year it is unnecessary to store wheat from one harvest to another, but only to meet domestic consumption until the next harvest. In this light an excessive carry over from one year to another is seen as a perpetual price depressing factor.

The justification for diversion by government of a greater portion of the national income to farmers is the benefit derived by manufacturers from federal legislation. Chairman Jones of the House Committee places his finger on the right spot when he states that, instead of calling it a processing tax, he prefers to designate the payments a tariff offsetting benefit. It is obvious that lawmakers can not fairly enact class legislation to take from one class of citizens to reward another class. If one citizen is entitled to feed at the crib of legislation so is every other.

Truly the President has handed to the Congress a confusing and most difficult task. At a time when relief rolls must be cut down for lack of funds how can the agricultural committees draft bills providing for diversion of tax money from the millions on relief to the farmers?

New taxes levied to pay farm benefits will raise the costs of manufacturers and traders and the price of what the consumer must buy, in a vicious upward spiral, the logical outcome of which is a great reduction in the American standard

of living, directly contrary to the "more abundant life" promised by the office holders when they sought votes.

Three More Dust Explosions

Three dust explosions were reported in the last number of the Journals. Yet many elevator owners tolerate such dusty, dirty surroundings as to invite frequent explosions. Such marked improvement has been accomplished in the matter of controlling the dust in grain handling plants, the continued scattering of dust without any effort to control the dust seems inexcusable.

Whenever grain dust is suspended in atmosphere in proper proportions and exposed to a light or flame, a violent explosion is almost certain to occur. While 1937 has been peculiarly free from disastrous explosions of grain dust, the hazard is ever present and no elevator operator can afford to ignore this dangerous factor in grain elevator operation.

Controlling (?) Food Production

While the politicians of the U.S.A. are striving eagerly to gain control of farm production of many commodities, other countries are conducting energetic campaigns to induce their farmers to increase the production of all foodstuffs.

So many national governments have failed ignominiously in their attempts to control the production of rubber, coffee, sugar, cotton, wheat, rye and other necessities of life, it would seem that other governments having many farmers would profit by the expensive experiences of those who have tried, lost and abandoned their attempts to regulate the production of farm products.

Mexico's wheat control committee is now earnestly urging its farmers to increase production of wheat, and the Soviet government has recently shot over five hundred citizens charged with mixing and spoiling wheat. To attempt to regulate the price or the production of any commodity of world consumption is a stirring signal for the rest of the world to double its efforts at production. No country can hope long to control the production of any necessity, because all major nations are eager to become self-sustaining.

The influence of supply and demand on market values of world commodities since the beginning of international trade has controlled production more equitably than any laws or regulations made by man, and can always be depended upon to function more fairly to both producers and consumers. Whenever the politicians of any nation have attempted to override economic laws they have made a wasteful mess of commerce.

The Weevil's Paradise

Every experienced elevator operator knows, or at least should know, that the weevil's most delightful resort is the damp, dark, dirty corners of the grain storehouse. The weevil bitterly resent any disturbance, so seeks refuge in accumulations of dust and dirt where he can thrive and multiply without any interference.

The elevator operator who cleans his elevator boots and all nooks and corners frequently during the summer months, does not have much trouble with weevil. The bugs do not propagate during the winter months in cold climates. The elevator operator who cleans his plant every month of the year provides most discouraging surroundings for the pest and breaks up most settlements in their early stages. While it may be somewhat expensive to clean an elevator every week during the summer season, it is small as compared with the discount usually earned by each carload of weevily wheat.

NO GRAIN DEALER can afford to incur the enmity of his brother grain dealers thru the practice of unethical trading methods. Few grain dealers will resent a competitor making money for himself so long as he does not ruin the possibilities of profit for others. Seizing what may be thought of as a competitive advantage in the form of a contract for storage of grain, and concluding that this contract makes it unnecessary to take a reasonable handling margin on the grain when it is purchased is only a delusive snare that may easily lead he who uses such an advantage into difficulties. Fortune is a fickle creature. Some day the competitor may enjoy an advantage.

LIFE

We live in deeds, not years; in thoughts, not breaths; in feelings, not in figures on a dial. We should count time by heart throbs. He most lives who thinks most, feels the noblest, acts the best.—Bailey.

An Observing Farmer's Poem

SIOUX CITY, IA., Oct. 20, 1937.—Clyde M. Campbell, 49-year-old farmer from Alexandria, S. D., presented testimony before the U. S. Senate sub-committee on agriculture today in the form of this poem.

The Charge of Wallace's Brigade

Half a league, half a league,
Half a league onward;
Into Sioux City rode
The crop control six hundred.
County agents to the right of them
Payrollers to the left of them
Brain trusters back of them
Volleyed and thundered.
Someone had blundered.
Their's not to reason why,
Their's not to make reply,
Their's just to testify,
So into the Valley of Death
Into the shadow of Hell,
Ready to sell their soul
For compulsory crop control;
No, not because they felt that way
But just to get four bucks a day—
Valiant six hundred.

Only Yellow Soybeans Wanted

One of the major processors of soybeans has refused this year to buy black or brown soybeans. Into this classification falls the Wilsons, Virginias, Laredos and Mammoth Browns that have been popular in southern areas because of their ability to produce hay.

The objection to the black or brown beans is that they contain an average of 5 per cent less oil than do the popular yellow beans like Illinis, Dunfields, Mukdens, Mandels and Manchus, that are familiar to dealers in the Corn Belt. This low oil content, according to leading processors, justifies a discount of 15 to 20 cents per bushel on the black and brown beans, depending upon the price of soybean oil.

The black and brown beans average only 14 to 15 per cent of oil or about 8½ pounds to the bushel, while the yellow beans will run 19 to 20 per cent of oil, or about 11½ pounds to the bushel. With oil at current figures, say 6c per pound, the three pounds less oil in a bushel automatically gives the black and brown beans a discount of 1½c per bushel under the prices prevailing for yellow beans.

Farmers may be willing to accept discounts on beans harvested from fields originally intended for hay. But there is another objection. The oil from the black or brown beans has a greenish tinge objectionable to buyers of edible vegetable oils. Such oil may be moved only in markets such as are offered by the paint or linoleum industries. Most of last year's production of soybean oil moved in the edible oils market. Hence, it is only natural that the processors have no wish to risk contamination of their tanks of edible oil with oil of greenish color. The safe course for them is to refuse to buy black or brown soybeans.

"As far as we are concerned," says E. F. (Soybean) Johnson, of Ralston-Purina Co., "the black and brown beans are definitely out. We don't want them for processing." Other experienced soybean processors have likewise refused to use the black and brown beans, reducing the market for these beans to the demand for seed to be sown for hay.

Winnipeg, Man.—Delegates to the annual convention of the Manitoba Pool Elevators, Ltd., here, Oct. 17, adopted a resolution urging the Canadian Wheat Board to take delivery of durum wheat if the price of No. 1 durum falls below 90c per bushel at Fort William. The board's regulations provide for acceptance of No. 1 northern wheat if the price falls below 90c.

Supreme Court Decisions

Railroad Crossing.—Residents, taxpayers and users of city street which was closed by city as railroad crossing held to show such special interest as would authorize them to maintain action for mandamus against city for removal of obstructions and against railroad company for restoration of railroad crossing.—*Donalsonville Grain & Elevator Co. v. Atlantic Coast Line R. R. Co. Supreme Court of Georgia. 191 Southeastern 87.*

Demurrage on Rejected Shipment.—Carrier would not be entitled to arbitrarily hold shipment after rejection by consignee in Arizona and notice from shipper to unload in order to save demurrage charges until it saw fit to sell the shipment, and impose upon shipper demurrage charges for any unreasonable or unnecessary time taken by it to unload.—*Reed v. Southern Pacific Co. Court of Civil Appeals of Texas. 99 S. W. (2d) 1026.*

Closing Trade.—A speculator whose margin account with broker was closed out as result of negligent delivery of telegram, but who failed to reinstate trade next day at lower price than that at which he was closed out, was not entitled to recover damages from telegraph company, since sole proximate cause of speculator's loss of speculative future profits was his failure to reinstate the deal.—*W. U. Tel. Co. v. Sweeney Court of Civil Appeals of Texas. 106 S. W. (2d) 663.*

Bureaucratic Discretion Unconstitutional.—A statute or ordinance which undertakes to regulate lawful business or occupation by conferring upon officer, commission or board authority within his or its judgment or discretion to grant or withhold license or permit to engage in business or occupation, and which does not prescribe rule or standard to which all persons similarly situated may conform, denies equal protection of laws (Cons. U. S. Amend. 14).—*State v. Chisesi. Supreme Court of Louisiana. 175 Southern 453.*

The Bankhead Act.—Landlord who levied distress on tenant's cotton to satisfy landlord's lien held not entitled to certificates issued to tenant under the Bankhead Act which tenant transferred to his attorney, on ground that certificates were an incident to the crop and that tenant's and attorney's actions in relation thereto constituted a conversion thereof, where there was no showing that title to certificates was not vested in tenant. (Bankhead Cotton Control Act, 48 Stat. 598).—*Moore v. Dickson. Court of Civil Appeals of Texas. 102 S. W. (2d) 279.*

Warehousemen.—Negotiable warehouse receipts payable to bearer may be negotiated by mere delivery, by any person to whom custody of receipt has been intrusted by owner, if at time of such intrusting, receipt may be negotiated by delivery, and person to whom receipt is negotiated acquires such title to goods as person negotiating receipt and depositor of goods or person to whose order they were to be delivered by terms of receipt had or had ability to convey to purchaser in good faith for value (Code 1930, sections 3517, 21, 27, 37, 38).—*Lundy v. Greenville Bank & Trust Co. Supreme Court of Mississippi. 174 Southern 802.*

Farmer Has Title to Wheat Not Paid For.—Where farmer sold wheat at cash sale, a part of which he raised on his farm and a part of which he acquired as toll from threshing wheat, statute providing for retention of title by seller until produce was fully paid for applied both to wheat grown on farm and wheat acquired as toll (Code 1933, sec. 96-110). In this case L. L. Hollis, farmer, sold to Victor and Raymond Martin, claiming to represent the Fain Grain Co., 333 bus. wheat that they resold to the Alco Feed Mills. On the Martins failure to pay Hollis brought suit against the Alco Mills, who had to pay for the wheat twice.—*Hollis v. Alco Feed Mills. Supreme Court of Georgia. 192 Southeastern 184.*

Northwest Iowa Attracts Big Group Meeting

A meeting of the Northwest Iowa group of the Western Grain & Feed Dealers Ass'n at Spencer, Ia., the afternoon and evening of Oct. 22, attracted a crowd of 150 grain dealers, and was pronounced one of the biggest and best group meetings ever enjoyed.

J. J. MULLANEY, Sioux City, was the capable toastmaster, introducing leading lights of the ass'n and entertaining with humorous remarks.

S. W. WILDER, Cedar Rapids, past pres. of the Grain & Feed Dealers National Ass'n, spoke briefly on developing a united front and a common interest in solving the grain trade's problem.

RON KENNEDY, sec'y of the Western ass'n, made a brief plea for membership, and outlined the future of the ass'n.

R. C. BOOTH, Cedar Rapids, pres. of the Western ass'n, explained the benefit of ass'n membership, which he classified as a grain dealer's privilege.

A meeting of the Eastern Group of the Western Grain & Feed Dealers Ass'n has been scheduled for Cedar Rapids, Ia., Nov. 4.

Corn Price Stabilization

President Roosevelt Oct. 20 announced his intention of halting further commitments by the RFC. Officials of the Commodity Credit Corporation stated that it would be impossible for it to handle a loan on the 1937 corn crop without RFC assistance.

Officials of the A.A.A. appear uncertain as to the possibilities of a corn loan in view of this unexpected change in the situation.

A number of farm agitators headed by Edward A. O'Neal, pres. of the American Farm Bureau Federation, on Oct. 20 asked the president to stabilize the price of corn this fall at 60 cents per bushel by means of corn loans.

Confirmation Blanks

Simple - Complete - Safe

If you would avoid trade disputes and differences, and prevent expensive errors, use triplicating confirmation blanks. You retain tissue copy, sign and send original and duplicate to customer. He signs and returns one and retains the other.

This places the entire burden for any misunderstanding of your intentions upon the other party and protects you against the expensive misinterpretation of your trades.

The use of these confirmations makes for safer business. Spaces are provided for recording all essential conditions of each trade.

Fifty confirmations in triplicate, bound with pressboard and wire stitched, size 5½x8". Order Form No. 6 CB. Weight, 9 oz. Price 75c; three copies \$2.00, plus postage.

Grain & Feed Journals

CONSOLIDATED

332 South La Salle St., Chicago, Ill.

Asked—Answered

[Readers who fail to find trade information desired should send query for free publication here. The experience of your brother dealers is worth consulting. Replies to queries are solicited.]

Grading Sieves for Soybeans?

Grain & Feed Journals: In reading over the Journal of Oct. 13 we note that on page 291 that we dealers should supply ourselves with a set of special soybean screens.

This year is a very bad one for weed seed. We have taken as much as 24 bus. out of a 1,100-bu. car by screening it over an 18' screen of 5 to the inch mesh. This loss wipes out a lot of the profit that we should have.—H. T. Walton & Son, Mayview, Ill.

Ans.: The ordinary sieves take out too much or too little of the foreign material and split beans. To arrive at a grading that will correspond to that given the shipment by the official soybean inspector the identical two sieves should be used.

One sieve has round holes 10/64 inch in diameter for the foreign material, and the other has slots 10/64 inch wide and 3/4 inch long, for the splits.

The government's soybean rule book states that splits and broken beans do not seriously affect the value of a given lot for industrial purposes.

Foreign material includes all matter other than soybeans and all sound pieces of soybeans which will pass through a round hole 10/64 inch in diameter.

Copies of the Handbook of United States Standards for Soybeans may be obtained gratis by addressing H. H. Whiteside, Bureau of Agricultural Economics, New Post Office Building, Chicago, Ill.

Desires Abundant Prosperity

Louis J. Taber of Columbus, O., national president of the Grange, speaking at the New Jersey State Fair, came out for a "prosperity of abundance," describing himself as "sick and tired of empty corn cribs or of imported Argentine corn in my barnyard."

The farmer, he declared, must not be penalized for abundant crops, adding that elimination of waste and research for developing non-food uses for crops would be the solution.

Taber approved the Soil Conservation program, for "the soil is the foundation of the Nation's wealth." He urged, however, that it be put in the hands of the farmers.

"We want no bureaucrat telling us when and where to plant," he asserted.

Chicago, Ill.—At the closing time at Liverpool, Oct. 25 December wheat was just 30c over the December delivery at Chicago, which would seem to be a full shipping difference notwithstanding the 6c duty on our wheat. Logically one would expect a liberal volume of business at such a difference.—Hulburd, Warren & Chandler.

Coming Conventions

Trade conventions are always worth while, as they afford live, progressive grain dealers a chance to meet other merchants from the same industry. You can not afford to pass up these opportunities to cultivate friendly relations and profit by the experience and study of others.

Feb. 9, 10. Farmers Grain Dealers Ass'n of Illinois, Marquette hotel, Peoria, Ill.

Feb. 16, 17, 18. Farmers Elevator Ass'n of Minnesota, Minneapolis, Minn.

Feb. 22. Pacific Northwest Feed Ass'n, Seattle, Wash.

Feb. 22, 23. Farmers Grain Dealers Ass'n of Ohio, Toledo, O.

March 27, 28, 29, 30. Society of Grain Elevator Superintendents of North America, Kansas City, Mo.

May 9, 10. Illinois Grain Dealers Ass'n, Danville, Ill.

Milling and Baking Quality of Canadian Wheat

W. F. Geddes and T. R. Aitken of the Board of Grain Commissioners Research Laboratory at Winnipeg on Oct. 16 gave out the results of their tests of the new crop of Western Canadian wheat.

This year, the most important degrading factors are improperly ripened and black-point infected kernels, frosted wheat being practically non-existent. Sufficient thin rusted wheat has been marketed to warrant re-introducing the Special grades, but to date only 4.6 per cent of the cars inspected in the Western Division has been classified in these grades, while 52 per cent of the crop has graded No. 2 Northern or higher. Less than one per cent of all cars inspected has graded tough or damp.

Compared with corresponding grades for 1936, with the exception of the two Garnet grades, this year the test weight per bushel is higher, the protein content lower, flour gassing-power somewhat higher, water absorption slightly lower, and baking strength inferior as reflected in gluten quality, dough-handling quality, loaf volume and blending value. There is much less difference in the strength of the first six grades than is usually the case. The Garnet grades are superior to those of last year in all the above mentioned characteristics.

The Manitoba grown crop this year exhibits characteristics not often found in wheat from this section of the country; many samples inspected have contained varying percentages of one or all of the following types of kernels, namely: (1) improperly ripened, (2) green, (3) bronzy-green, and (4) black-point, all of which are plump and well filled.

The so-called "improperly ripened" kernels are characterized by a dull brownish color instead of the clear red associated with normal Manitoba wheat; the "green" range in color from pea-green to a greenish-brown, while the "bronzy green," as the name implies, are intermediate in color to these other two types. In the majority of cars inspected, the percentages of these three types of kernels has not been very high, but all three forms are important grading factors this year.

"Black-point" infected kernels or "smudge," is something rather different from the above three types and is caused chiefly by the fungus "Helminthosporium," the development of which is favored by the accumulation and retention of moisture at the germ end of the kernel, when the grain stands in the field, either uncut or stooked under unfavorable weather conditions. In some instances, the black discoloration is confined solely to the germ end of the kernel, while in others the damage is more extensive and may vary from a dark discoloration along or inside the crease to a complete discoloration of the entire seed coat. "Black-point" infected kernels are fairly common in macaroni wheats, but are found much less frequently in bread wheats.

Of the 19,792 cars of straight grade wheat inspected up to and including Sept. 30, 1937, 52 per cent graded No. 2 northern or higher, as compared with 81.4 per cent for 1936. The percentages of grades Nos. 3 northern, 4 northern and Garnet Nos. 1 C.W. and 2 C.W., are considerably higher this year, while there is almost 5 per cent of the Special grades which were not in force last year.

Penetration of Gaseous Fumigants

Recently it was stated at a conference of entomologists that heavier-than-air gases introduced at the top of 80-ft. bins did not penetrate the grain mass below sufficiently to produce a 100 per cent kill. One bin was given a dose twice as great as the other received, but even then, at 20 ft. from the bottom, the highest kill was 93 per cent. In the bin with the smaller dosage the kill was but 79 per cent.

In describing another experiment, it was shown that substances such as grain and its products absorb considerable quantities of the gases used, altho giving them up completely with proper aeration, which suggests that the small kills in the lower levels of the grain bins were due to an insufficiency of the lethal gas. This was corroborated by the results obtained in "atmospheric" vaults when a given amount of fumigant was used in connection with a large and a small quantity of flour.

Apparently the comparative weight of the gas and the air played no significant part in the results; the evidence indicates that both in connection with the bins and the chambers some of the contents absorbed much more of the lethal agent than was necessary to accomplish a 100 per cent kill, leaving an insufficient amount for the remainder of the wheat or of the flour.

Death of A. R. Taylor

Albert R. Taylor, of St. Joseph, Mo., vice president of the Stratton Grain Co., of Milwaukee, Wis., and manager of its St. Joseph branch, died Oct. 14 at his home in that city.

He was the son of A. K. Taylor, who was prominent in the grain trade circles of the country some twenty years ago, when the large grain firms of Fagg & Taylor, and Taylor & Bournique were in existence.

He was president of the Milwaukee Chamber of Commerce in 1923 and 1924, and nine years ago went to St. Joseph, where he was elected president of the Grain Exchange in 1934, and operated the 2,000,000-bu. elevator in the Union Terminal yards. He had been chairman of the transportation com'te of the Exchange and was a director at the time of his death.

His favorite sport was sailing, and he was a member of the Milwaukee Yacht Club.

The widow, a daughter and three sons survive him.



A. R. Taylor, St. Joseph, Mo., Deceased.

Letters from the Trade

[The grain dealers' forum for the discussion of grain trade problems, practices and needed reforms or improvements. When you have anything to say of interest to members of the grain trade, send it to the Journals for publication.]

Buy Grain by Hundred Weight Only

Grain & Feed Journals—We do not hear of bushels out here. There are a lot of farmers here who do not know how much a bushel is. Everything is sold by weight, which we think is much better for in that way all grain is figured alike by the hundred. It makes it much easier to figure—L. B. Messer, Greeley, Colo.

Government Interference

Grain & Feed Journals: Prospective farm stabilizing legislation that will come before the Congress soon to convene will have a marked influence on the plans of grain and feed dealers and flour manufacturers for expansion during the near future.

Federal control of interstate shipments thru the setting of quotas, and dictation of specifications and minimum prices, plus even conservative crop adjustments along with federal buying of grain for the "Ever Normal Granary," and possible processing taxes, may be expected to reduce interstate shipments, and increase intra-state trucking and short-haul rail movement of farm products. Decentralization of large milling operations is in prospect. But new building, and improvement of existing grain elevators and feed mills is not likely at present.—R. E. Miller, Nira (Wellman p. o.), Ia.

Wire Ropes for Car Pullers

Grain & Feed Journals Consolidated—There are several types of rope suitable for car pullers in grain elevators located at ports along the Great Lakes or salt water ports. The type of rope most suitable for a given installation will depend somewhat on the particular details applying to each installation.

Apparently manilla ropes have not proven very satisfactory for this service. The nearest substitute would be a durable wire rope which is made by wrapping the steel strands of a wire rope with Marlin before they are closed into the finished rope. A rope of this type can be handled almost as easily as a manilla or hemp rope and in addition has considerably greater strength due to the steel strands embedded in it. It has a fair measure of corrosion resistance since the Marlin covering on the strands after becoming compacted during the early part of the rope service will serve somewhat as a seal for the steel strands in the rope and will prevent to a certain extent the penetration of moisture to the steel strands. This protection is not, however, 100% effective and therefore in time the steel strands inside the rope, if the corrosive influences are rather severe, will eventually corrode. Although the Marlin covering is of considerable advantage from the standpoint of rope handling, it has the disadvantage of preventing convenient inspection of the steel strands in the rope so as to determine the extent to which they have deteriorated. As a result, therefore, the proper time for rope removal cannot very well be judged from a surface inspection of a Marlin clad wire rope.

It is entirely possible that a galvanized wire rope, particularly if made in the proper construction and if coated with an extra-heavy layer of galvanize, may be the most suitable type of rope for car pullers. I note that "slivering" of the rope is most undesirable. We assume this to mean that when

broken wires occur, the ends of these wires should not project outside the surface of the rope. This can be accomplished fairly well by the use of a preformed rope construction, the rope being fabricated in such a manner that there is very little tendency for broken wire ends to spring out appreciably after these wires have been broken due to the normal wear of the rope in service. The galvanized wire rope best suited to this work would be of the preformed construction and in addition would be very heavily galvanized as an extra-precaution against corrosion.

One of the types of rope recommended would be a 6x19 special galvanized Preformed Blue Center Steel Rope. Another type would be a more flexible 6x37 special galvanized Preformed Blue Center Steel Wire Rope. The 6x19 construction although being slightly less flexible would have greater corrosion and abuse resistance because of the larger size wires of which it is composed than the 6x37 construction. Therefore, if sheaves and drum over which the rope operated were of sufficient size, it would be more economical to consider the use of the 6x19 rope. In cases where sheaves and drums are fairly small, the extra flexibility of the 6x37 construction would probably be needed.

It may even be found that the use of the Independent Wire Rope Center will be desirable if the sheave and drum pressures are fairly high and if the loads are unusually heavy.—Jno. A. Roeblings Sons Co., by G. H. Cutter, Trenton, N. J.

Omaha, Neb.—The third free transit at Omaha, granted to Omaha grain men by the western railroads after bitter fight, went into effect Oct. 20, but little difference was made one way or the other since the big movement of grain is over. The chief benefits, therefore, will not show until the big grain movement next year. An intermarket transit between Omaha and Kansas City and a transit on the Pacific Coast grain are now being sought.

Hikers Load Ear Corn Into Trucks

By TRAVELER

How to serve customers demanding ear corn from its concrete elevator was a problem for the Farmers Grain Co. at Raymond, Ill., until Fred J. Mitts, the elevator man, said to its manager, L. E. Hendrickson, and his directors, "If you'll buy the hikers, I'll fix them so we can load trucks with ear corn right out of our receiving dumps."

The long driveway of the elevator is fitted with several deep ear corn receiving sinks,



Ear Corn Drag from Elevator Pits.

from which the ear corn is drawn to a sheller by a drag. Elevator man Mitts fixed a cut-off from the drag ahead of the sheller, connected the two hikers purchased to the sheller's motor thru a belt and clutch connection, and angled the hikers in combination thru a wall of the elevator to a point on the outside high enough to chute the ear corn into the boxes of trucks backed under the end of spout.

Not so fast as an ear corn leg, the device nevertheless does an effective job of loading trucks for the feeders who demand ear corn.

Italy will require 5 per cent of corn flour to be mixed into wheat flour mixtures effective Nov. 1, and 10 per cent after Dec. 1.

Sec'y of Agriculture Henry Wallace will cut down the cotton acreage for 1938 by 2,000,000 acres, it was announced Oct. 25. The earlier limit was 29,000,000, now it is set at 27,000,000. At the same time the A.A.A. announced an increase of 24c from 2c in the bribe to be paid growers of cotton consenting to participate in the soil conservation program at the expense of the taxpayers. It is doubtful that growers will accept the bribe.

Daily Closing Prices

The daily closing prices for wheat, corn, oats, rye, barley and soybeans for December delivery at the following markets for the past 2 weeks have been as follows:

	Option		Oct.		Oct.		Oct.		Oct.		Oct.		Oct.		Oct.		Oct.	
	High	Low	13	14	15	16	18	19	20	21	22	23	25	26	27	28	29	30
Wheat																		
Chicago	131½	93	97½	97½	100¼	99½	99	97½	99½	99½	97½	97½	97½	97½	97½	97½	97½	97½
Winnipeg	143½	107	117½	117½	119½	118½	118	115½	120	120½	119½	118½	118½	119½	119½	119½	119½	119½
Liverpool*			125½	126½	128½	126½	125½	124½	125½	126½	125½	126½	128½	129½	129½	129½	129½	129½
Kansas City	127	89½	95½	94½	97½	96½	95½	95½	96½	97½	95½	95½	95½	95½	95½	95½	95½	95½
Minneapolis	142½	102½	106½	106½	109	108½	108½	106½	109½	109½	108½	107½	108½	108½	108½	108½	108½	108½
Duluth, durum	113½	86½	91	91	93	92½	91½	91	93½	92½	91½	90½	90½	90½	90½	90½	90½	90½
Milwaukee	131½	93½	97½	97½	100¼	99½	99½	97½	99½	99½	98	97½	97½	97½	97½	97½	97½	97½
Corn																		
Chicago	86½	55½	58½	58½	58½	58½	59½	59½	59½	60	59	57½	58½	58½	58½	58½	58½	58½
Kansas City	88½	54½	56½	56½	56½	56½	57½	56½	57½	58½	57½	56½	56½	56½	56½	56½	56½	56½
Milwaukee	86½	56	58½	58½	58½	58½	59½	59½	59½	59½	59½	57½	58½	58½	58½	58½	58½	58½
Oats																		
Chicago	42½	27½	29½	29½	29½	30½	30½	30½	30½	31	30½	30½	30½	30½	30½	30½	30½	30½
Winnipeg	54½	38½	49½	48½	49½	48½	48½	47½	46½	47½	46½	46½	46½	46½	46½	46½	46½	46½
Minneapolis	38½	26½	27½	27½	28½	28½	28½	28½	28½	29	28½	28½	28½	28½	28½	28½	28½	28½
Milwaukee	41½	27½	29½	29½	29½	30½	30½	30½	30½	30½	30½	30½	30½	30½	30½	30½	30½	30½
Rye																		
Chicago	96½	69½	72½	73	74½	73½	73½	71½	72½	72½	72½	72½	74½	74	74	74	74	74
Minneapolis	91	64½	67½	69	68½	68½	68½	67½	68½	68½	67½	67½	68½	68½	68½	68½	68½	68½
Winnipeg	106½	79½	83½	81	83½	82½	81½	77½	79½	82½	82½	80½	82	82½	82	82	82	82
Duluth	82½	67½	69	69½	71	70	70½	69½	70½	70½	70	70	71	70½	71	71	70½	70½
Barley																		
Minneapolis	52½	42½	44½	44½	45½	44½	44½	44½	44½	45	45	45½	45½	45½	45½	45½	45½	45½
Winnipeg	70½	52½	62½	61	61½	61½	60½	60½	61½	61	60½	60	59½	59½	59½	59½	59½	59½
Soybeans																		
Chicago	126	91½	93½	93½	95½	97	98½	97½	97½	97½	97	96½	97	98½	98½	98½	98½	98½

*At daily current rate of exchange.

Grain Movement

Reports on the movement of grain from farm to country elevator and movement from interior points are always welcome.

Marsland, Neb.—Feed grains are being shipped in here.—Marsland Elevator Co.

Milwaukee, Wis., Oct. 18.—Lake movement of grain, season of 1937—Receipts: Barley, 466,694 bbs.; shipments—wheat, 3,259,663 bus.

Petersburg, Ind.—Many farmers are not satisfied with the price being offered for new corn and are holding it.—W. B. C.

Delmont, S. D.—Grain in farmers' hands, wheat, 20%; barley, 40%; oats, 50%.—Farmers Elevator Co., J. G. Williams.

Oak Grove, Mo., Oct. 7.—The Oak Grove Grain Co. has shipped 185 cars wheat of the 1937 crop and many farmers are still holding.

Clutier, Ia.—The Melvin Mundt elevator shipped out a carload of new soybeans Oct. 12, the earliest that beans have been marketed here.

Buckingham, Ia.—The Buckingham Grain Co. shipped out 3 cars of beans and 2 cars of corn and trucked 7,000 bus. of beans the week of Oct. 11.

Exira, Ia.—Laurence Hansen, local grain dealer, was buying corn, receiving, shelling and shipping several thousand bus. of it out from his elevators here, at Lorah and Adair, early this month, something very unusual for so early in the fall.

Buffalo, N. Y.—The first ship of the winter grain storage fleet docked at Buffalo Oct. 9 when the Michael J. Bartelme arrived at Lehigh dock from Fort William, Ont. She will remain here until the spring breakup on Lake Erie. Last year first winter storage ship did not arrive until Nov. 21.

Duluth, Minn.—The decline in grain movement from country points has resulted in the closing of one elevator for the winter. Lack of supplies to store and cost of operating old houses prompted the transfer of all business to a modern plant. Farmers are disposed to hold back crops in expectation of higher prices.—F. G. C.

Portland, Ore.—The surplus of Pacific Northwest wheat is becoming burdensome. Only 17,496,000 bus. of wheat have been received at all northwest terminals during the past three months, usually the best marketing period, against 21,423,000 bus. during the like period of 1936. The crop was estimated at 75,000,000 bus., with 7,000,000 bus. carry over.

Cincinnati, O.—September receipts of grain as compared to September, 1936, were: (part cars are included in totals) for 1937—wheat, cars, 124; shelled corn, 100; oats, 65; rye, 15; barley, 5; grain sorghums, 3; soybeans, 1; feed, 37; hay, 60; for 1936, wheat, 164; shelled corn, 372; oats, 37; rye, 23; barley, 3; grain sorghums, 1; soybeans, 0; feed, 17; hay, 144. Grain shipments for September as compared to Sept. 1936, were: wheat, 241 cars; shelled corn, 21; oats, 48; rye, 7; barley, 0; grain sorghums, soybeans, feed and hay, no record; for 1936, wheat, 176; shelled corn, 266; oats, 14; rye, 8; barley, 1; grain sorghums, soybeans, feed and hay, no record.—John O'Hara, in charge of inspection and weighing, Cincinnati Board of Trade, Inc.

Duluth, Minn.—Up to date there has been very little demand for freighters to load and hold grain for winter storage. Usually at this time of the season there develops quite a demand for winter storage boats but so far only a small number has been contracted. Two storage boats loaded in October were taken at a 3½c rate, with the present basis reported held at 3c per bushel. Local houses are now only about half filled, with expected good shipments still to be made before the freeze up closes lake movement. Charters to unload also continue to be made slowly, at 2c for Buffalo delivery on large cargoes and 2¼c on the small lots. Although the eastern demand for grain supplies remains a quiet factor, vesselmen predict that eastern mills will likely absorb the bulk of the 9,000,000 bus. spring wheat now stored here.—F. G. C.

New York, N. Y.—Grain receipts and shipments in September as compared to September 1936 were as follows: Receipts, in bus. 1937, wheat, 428,527; corn, 456,693; oats, 52,800; rye, 246,227; barley, 307,699; soybeans, kafir, milo, grain sorghum, no report; flaxseed, 374,625; millfeed, tons, 30; hay, tons, no report; 1936: wheat (bus.), 1,222,399; corn, 618,824; oats, 172,475; rye, 1,700; barley, 9,000; soybean, kafir, milo, grain sorghum, no report; flaxseed, 333,680; millfeed, tons, 65; hay, tons, 12; shipments, 1937 (bus.), wheat, 1,736,000; corn, 94,000; oats, no report; rye, 148,000; barley, 321,000; clover seed, 2,042; 1936: wheat, 1,774,000; corn, oats, rye, barley, no report; clover seed, 892; timothy seed, 14,288.

Ottawa, Ont., Oct. 21.—Wheat marketings in the Prairie Provinces for the week ending Oct. 15 amounted to 3,339,873 bus., a decrease of 443,794 bus. from the previous week when 3,783,667 bus. were marketed. During the corresponding week a year ago the receipts were 6,470,881 bushels. Marketings in the three Prairie Provinces for the eleven weeks from Aug. 1 to Oct. 15, as compared with the same period in 1936, were as follows, figures within brackets being those for 1936: Manitoba 28,534,473 (16,603,395); Saskatchewan 15,666,661 (67,007,600); Alberta 28,070,164 (29,005,457) bus. For the eleven weeks ending Oct. 15, 1937, and Oct. 16, 1936, 72,701,298 and 112,616,452 bus. were received from the farms.—R. H. Coats, Dominion Statistician.

Large Exports of Wheat Expected in November

At the meeting of the Grain Market Analysts Club held in Thornbury Hall, Chicago, Oct. 20, the consensus of opinion was that large exports of wheat from the United States would be worked during the next 60 days.

Richard F. Uhlmann, Chicago, the speaker of the evening, dwelt on the importance of export trade, referring to the stagnation of the market during the life of the Federal Farm Board. He said:

"Surpluses that have been grown and disposed of abroad since our earliest times have provided the new capital that we as a nation needed from abroad. The excess of exports over imports gradually paid off the indebtedness and finally we have become a creditor nation.

"The export business formerly stabilized the wheat market by anticipatory buying in a vigorous way. England being a large importer of breadstuffs, I have been going there every May before business in the new crop starts; but for three years there were no results as the United States imported wheat. Regardless of the size of the crop England must import 40 per cent of the world's needs.

"All we can do is to try to recapture the position we have lost."

Mr. Uhlmann took up the calculations of Broomhall on the probable international movement of wheat, and agreed with him in the main. The probable exports of each surplus country follow:

From	Estimated 1937-38 Wheat and Flour	Approximate 1936-37 Total Shipments
Canada	64,000,000	212,000,000
United States ..	120,000,000	
Argentina	112,000,000	162,000,000
Australia	80,000,000	107,000,000
Russia	32,000,000	88,000,000
Danube	72,000,000	79,000,000
Others	16,000,000	35,000,000
Total	496,000,000	595,000,000

The outlook for business in winter wheat from this country is good, as Canadian wheat is being held at stiff premiums. Little grain is coming from the southern hemisphere, while Russian offerings have been of smaller volume than expected and of lower grades than looked for. So far, Russia has shipped practically no spring wheat, and has offered none. Danubian wheat is definitely of poor quality.—Fred A. Record.

Crop Reports

Reports on the acreage, condition and yield of grain and field seeds are always welcome.

Marsland, Neb.—We are experiencing nearly total drouth here.—Marsland Elevator Co.

Petersburg, Ind.—Corn is being husked in Pike county. The yield is good.—W. B. C.

St. Joseph, Mo., Oct. 25.—An excellent quality of corn has been received on the St. Joseph market this season, with a good portion grading No. 2 and some of it No. 1. The condition has been instrumental in improved distribution to shortage areas.—T.

Minneapolis, Minn., Oct. 22.—Rye seeding has progressed rapidly during the good weather conditions all over the territory and especially in the Northwest States where most of the rye is raised. A normal acreage has been sown and much of it germinated and is now showing a fair stand. The seed sown in dry areas is still dormant but may come through in good shape next spring.—Cargill Crop Bulletin, T. R. Shaw, editor.

Dodge City, Kan., Oct. 16.—September rainfall for our state was only 68% of normal, very few localities receiving the usual September fall and the deficiency did not all occur in the western section, as some of the extreme eastern counties received very little rainfall. Olathe, Kan., in Johnson Co., recorded the least precipitation of any reporting point, which was only .07 for the month. Rains this week averaging from ¼ to ¾ of an inch fell over western Kansas and seeding activities have been resumed, but the amount received has been insufficient to wet the soil to a desired depth.—J. F. Moyer, sec'y, Kansas Grain, Feed & Seed Dealers' Ass'n.

Decatur, Ill., Oct. 23.—A week of general rains, while favorable for fall wheat and rye, has delayed progress of corn husking and soy bean harvest. About 85 per cent of wheat seeding has been completed, with the intended fall planted acreage of both wheat and rye reported somewhat less than a year ago. The acreage remaining to be sown is largely in Southern Illinois. Reports indicate 68 per cent of the crop is up and doing well. Corn husking started earlier than usual due to ideal September weather for maturing and drying the crop, but is not much farther along now than usual and is awaiting drying weather to put the corn in condition for cribbing. Quality of corn is excellent and a fair percentage of arrivals are now grading No. 4. Considerable decrease in receipts and country offerings this week. Elevator interests and industries are actively in the market. Very few soy beans harvested this week, about 50 per cent of the crop has been combined. Weedy condition of fields has tended to slow progress of combining beans. With weeds now killed by frost, dry weather is needed to advance harvest work. Beans are good quality, yields are ranging from 15 to 35 bushels.—Baldwin Elevator Co.

Interior Wheat Stocks

Stocks of wheat in interior mills, elevators, and warehouses on Oct. 1 are estimated by the Crop Reporting Board to be 157,307,000 bus., compared with 113,650,000 bus. on Oct. 1, 1936. Present holdings are the largest of the four years for which records are available.

Adding stocks in interior mills, elevators and warehouses to those on farms, stocks of all classes of wheat in these positions on Oct. 1 are above those on Oct. 1, 1936 and 1935, as is shown in the following table:

Class	1935 Thous. Bu.	1936 Thous. Bu.	1937 Thous. Bu.
Hard red winter...	102,752	102,144	168,621
Soft red winter...	118,642	105,398	136,891
Hard red spring...	74,958	48,015	76,742
Durum	17,919	10,641	19,765
White	57,940	72,957	89,034
Total	372,211	339,155	491,053

Highlights of the New Tax Law

By J. S. SEIDMAN, C.P.A., New York

Six times at bat and six hits, is the tax law record of our annual congressional sessions. The one that just closed brought home the Revenue Act of 1937 on a squeeze play in the last inning. It all happened so quickly and the technique was so complex, as to baffle many of the players, no less the spectators. We did, however, have reason to believe that something would happen because way back in June, the President called on the team to swing into action and do some loop-hole plugging. He called attention to eight weak spots. Let us here review how Congress responded.

Foreign Personal Holding Companies: You may recall all the "dirt" about taxpayers who incorporated their pocketbooks through companies in the Bahamas, Panama, or other foreign places where taxes are low and information concerning stockholders difficult to get. That was listed as public loophole No. 1. Second in ranking, and related to it, was the "clever little scheme" about organizing private foreign insurance companies, taking out a policy, and then borrowing against the policy so as to get an interest deduction. The new law puts a damper on all this.

The law also has a provision reducing the tax cost of winding up the company and sending it to the great beyond, if the burial takes place before the end of this year. Specifically, the profit on the liquidation is stepped down to as much as 30% of the actual amount, depending on the length of time the stock had been held.

Talking of death, heretofore where a stockholder of a corporation died, the market value of the stock at the time of his death was taken as the amount on which his estate or beneficiary figured gain or loss thereafter. Now if the stock is of a foreign personal holding company, and if the cost to the deceased stockholder is lower than the value at the time of his death, the lower figure will be used.

Incidentally, there is considerable doubt concerning the constitutionality of this whole arrangement about taxing stockholders on income that they have not in fact received, and it would be rather anomalous if in attempting to close the door, it were to eventuate that because of an illegal tax, the door was left wide open, with foreign companies and their stockholders free from personal holding company tax entirely.

Domestic Personal Holding Companies: No. 3 on the list was incorporating the pocket-book right at home through an American company, and storing up income there. A sure-fire answer is provided by the new law through tax rates on these holding companies so steep, that it can no longer be a saving to have the corporation pay the tax instead of the individual. The old rates ran from 8% to 48%. The new rates are 65% on the first \$2,000 of undistributed income and 75% on the remainder.

Then to make assurances doubly sure, many deductions that these companies were previously entitled to have been eliminated, such as the unlimited amount of losses on securities or other capital assets, or the unlimited deduction for charitable contributions. Now, the losses will be limited to \$2,000 and the charitable contributions to 15% of the net income. Also, heretofore, a personal holding company was allowed to reserve or accumulate 20% of its income free from personal holding company tax. Now, this cushion is entirely removed and no reserve permitted. Heretofore, 80% of the gross income had to be from interest, dividends, royalties, annuities, and security profits, before the personal holding company tax came into play.

The list has now been expanded to include profits from commodity futures, income from estates, and, under certain circumstances, in-

come from rents and personal services. Then again, under the old law, the personal holding company tax could be expunged if the stockholders picked up in their returns, their pro rata share of the company's undistributed income. The company could later distribute this income, tax-free to the stockholders. All of this has been kicked out of the window. Now, if a personal holding company does not distribute its profits, it must pay the tax, and then when it distributes what is left, the stockholders must pay all over again.

Tax-dodge No. 4 was said to be the incorporation of a yacht, town house, racing stable, etc. The "stunt" was outlined as follows: An individual could not take as a deduction the expenses of maintaining the yacht, town house, etc., because they were items of a personal nature disallowed by the law. Transferring the property to a corporation gave the property a business character and permitted the operating expenses and depreciation to be offset against corporate income that would otherwise be taxable.

The new law attacks the deduction of these expenses by the company. In point of fact, it disallows them entirely to the extent that they exceed the rental income from the property, unless the company can prove to the government's satisfaction that the property is needed or profitable for business purposes and that the company is getting the highest possible rent for the property. These are pretty stiff requirements from a proof standpoint. That is just what they are intended to be. They apply, however, only to personal holding companies. The ordinary run of corporations can get their deductions as before. Furthermore, even for personal holding companies, the disallowance of the deduction is confined only to the 65% and 75% tax and does not apply to the regular 8% to 15% normal tax or the 6% to 12% excess profits tax.

Deductions: Next on the list was the deduction for interest and losses that taxpayers were able to claim on transactions with their personal holding companies, family trusts, etc. The new law seeks to button this up in several ways. In addition to the previous disallowance of losses among members of a family, the range of non-deductibility is expanded so that no losses can be taken in transactions between an individual and a trust that he may have set up, or between one trustee and another where both trusts were set up by the same individual, or between a trustee and the beneficiary of a trust, or between two corporations controlled by the same individual (or by his family or partner), if one of the corporations is a personal holding company.

Furthermore, in the good old loophole days with a taxpayer having the right to make returns on the basis of expenses incurred or income earned (known as the accrual basis), as distinguished from expenses paid out or income received (known as the cash basis), this sort of result was possible: A corporation on the accrual basis would deduct for expenses incurred or interest accrued in a transaction with its controlling stockholder. Actual payment of the expense or interest would not be made. The stockholder would make his report on a cash basis, and not having received anything, would have no income to report.

The result was the corporation got a deduction, but no corresponding income was reported on the other end of the transaction. The new law says "no tickie, no shirtee," no income, no deduction. Concretely, unless the expense incurred or interest accrued is actually paid within two and one-half months after the close of the year, where the item, unless paid, does not have to be reported by the other party, then the deduction for the accrual cannot be taken.

This is a very serious restriction, for the

way the law reads, the deduction once denied, will evidently never be allowable even when the interest or expense is actually paid, and reported by the recipient. It would apply to such items as officers' salaries. There is a limitation on the application of this restriction in that it covers only those cases where the parties concerned are so related, that if instead of interest or expense deductions, losses were involved, the losses would not be deductible.

Multiple Trusts: Multiple trusts were decried as loophole No. 6. The complaint there, was that taxpayers were able to beat the graduated surtax rates by setting up oodles of trusts for members of a family, and each trust would get a \$1,000 exemption plus its own climb up the rate ladder, making the aggregate tax very much smaller than if all the income involved were reported by one taxpayer. The only plug inserted now was to take away the \$1,000 exemption.

Others on the List: Taking a wife or children into a business partnership as a means of splitting income was listed as No. 7. Last on the list was the pension trust whereby companies set up deductible retirement allowances for their officers and directors, while the individuals did not have to report the amounts as income. Nos. 7 and 8 are still at large. At least, there is nothing in the law confining them (except that foreign personal holding companies will now be denied the pension trust deduction).

That "major cause of revenue loss" known as community property, under which eight states permit husband and wife to divide their income, no matter who actually earned the income in the first instance is also spurned by the new law.

With respect to the items mentioned as not having been acted upon, it may be just a case of taking time for some reconnoitering. In the meantime, the Revenue Act of 1937, as the present newcomer is known, holds the center of the stage and gives us plenty to think about.

Mixing Old with New Corn

By the ELEVATOR SUPERINTENDENT

Now that the new-crop corn is beginning to seep into market, we corn-custodians have to be on our toes. Each year seems to bring up its own special problems when the various crops move in to the terminals. One year it is musty rye; a dab of weevily wheat; a smattering of high-moisture corn; a dash of weathered oats.

This year is running true to form on the new corn coming in, inasmuch as the country elevators still believe they can mix old crop with new crop corn. They not only believe they can, they DO.

A fairly noticeable percentage of country-run corn hitting the terminal markets this season contains the old diabolical mixture of old and new crop kernels. We all know what that means, a moisture test for the car running average, but the load still contains those high-moisture babies that raise hob with stored grain.

So my advice in this matter is, brothers, pinch the kernels with the old thumbnail and determine just what you are taking in for store.

Oppose Wage and Hour Bill

The Nebraska Farmers Elevator Ass'n at its annual meeting Oct. 22 adopted resolutions condemning the Hugo Black-Connelly bill as undue interference with the farmer, and opposing increases in freight rates on agricultural products.

J. R. Morrison of Chappell, president since 1931, was re-elected. W. M. Burr of Kearsaw was elected vice-president and Frank Rutherford of Omaha was re-elected secretary-treasurer. Lincoln was selected as the 1938 convention city.

Echoes of the Annual Convention of

The Transportation Situation

By L. WARRINGTON BALDWIN, Chief Executive Officer Missouri Pacific Lines, before Grain and Feed Dealers National Ass'n

Since 1933 railroad business has been making steady gains, and the total so far this year is slightly larger than for the same period of any year since 1932. On the face of it, this sounds highly encouraging, but it should be borne in mind that less freight has moved by rail since Jan. 1 than was handled in the corresponding part of any year from 1922 to 1931.

Railroad business is a volume business. That is, the railroads must sell transportation service in volume in order to keep the quality of service good and the costs of the service low. This has led to the oft-made statement that the railroads have no problems that additional traffic will not solve. And while that is true in a broad sense, it is also true that sufficient additional traffic to solve the railroads' problems is out of the question so long as public policies dictate the use of tax payers' money to subsidize competing forms of transportation, and so long as public policies make it possible for competing forms of transportation to operate without an equitable degree of the regulation and taxation imposed upon the railroads.

The highways of practically all the states are cluttered with trucks carrying on a common carrier business, regardless of how they are classified, the owners of which thumb their noses at regulation and taxation and at organizations like this one which view this itinerant, fly-by-night way of doing business as a menace.

The continual lowering of rail rates in an effort to force the practically unregulated and non-taxpaying trucker out of business would be as unsound as it would be unfair, for not only would such policy tend to compel higher rates on commodities that cannot be moved by highway, but it would accomplish no good as far as ending competition is concerned and in the end would add to the carriers' financial difficulties.

The trucker may and does slash rates at will, exerting a demoralizing effect upon the railroads, upon the so-called legitimate truck operators and upon general business. Our entire business structure has been built and must endure upon rare equality and the unregulated, or practically unregulated, trucker is undermining this foundation. In addition he has become an itinerant merchant and as such is relieved of the obligations borne by established business.

Operating over a public-paid-for right-of-way, with no restrictions as to safety, hours or wages comparable to those observed by the railroads, and with no responsibility as to liability, he competes unfairly with the carriers, and, with no rent or property tax to pay comparable to the rent or taxes of the legitimate business man, and with no civic responsibility to assume, he competes unfairly with the established merchant. Thus he is proving a menace to the future of the small town and serves no useful or constructive purpose. It would seem only fair and just that he should be compelled to operate under a strict form of registration and pay for a license to engage in trade, be made to carry adequate insurance to cover possible injury to persons and property, be forced to contribute a just share of expense of roadway maintenance, to maintain his equipment in a safe condition and not be allowed to handle loads of a weight that batter to pieces a highway that he did not help to build.

Average revenue per ton mile for the first six months of 1937 was 4.8 per cent less than in the first six months of 1936. Since 1930 average freight revenue per ton mile

has decreased 14 per cent although the average wholesale price of all commodities is now slightly higher than in 1930. If average rail rates had moved up at the same rate as average commodity prices, this year's rail traffic would produce, in round figures, \$500,000,000 more than will be realized. And that, in round figures, would just about offset the additional operating expenses and taxes the railroads have had to assume during the last two years. On an annual basis the railroad retirement tax and the social security tax will cost the carriers \$97,500,000, the mounting cost of fuel adds \$63,000,000, the increased cost of materials and supplies, \$111,000,000 and recent wage rate increases will total \$135,000,000.

The "split-train" bill would cost the railroads from \$100,000,000 to \$150,000,000 extra a year in operating costs, with no direct or tangible benefits except, of course, to those for whom it would provide employment but whose services are not required. It is being agitated as a safety measure, altho any informed operating railway official can cite facts and figures without end to prove that limiting trains to 70 cars would not add one whit to the safety of trainmen but would automatically increase highway crossing casualties and fatalities.

The bill strikes at the very thing that makes for railroad efficiency, the one thing which has made it possible for the carriers to survive at all in the face of a general decline in rates and a shrinkage in traffic. The only way for a railroad to perform more transportation service for less money is to increase the number of tons carried in a car and the number of cars carried in a train. Thus, over a period of several years and with this fact constantly in mind, the railroads have invested billions in larger and heavier equipment and in building bridges and tracks and yards to accommodate long and heavy trains.

To make it illegal to operate a train of more than 70 cars would reduce materially the value of these investments; increase operating costs, impair the present quality of service and call for a vast capital expenditure for additional

motive power, and additional terminal facilities would be needed.

Considered from every angle the "split train" proposal is utterly without merit.

Last year the railroads performed 40 per cent more service for the average passenger patron's dollar than they did 15 years ago, and about 24 per cent more freight service for the average shipper's dollar.

Presents to the Retiring President

Closing rites at the last business session of the 1937 convention of the Grain & Feed Dealers' National Ass'n, at Dallas [reported in the Journals for Oct. 13] was the presentation of gifts to retiring pres. S. W. Wilder, Cedar Rapids, Ia., who was bringing to a close two very active and highly successful years as head of the organization.

The presentation was made by Geo. Booth, Chicago, a past pres. of the ass'n. His glowing tribute to the growth of the organization, and the new solidarity in the grain trade that has followed Mr. Wilder's administration, was a build-up for presentation of a huge Mexican sombrero, just because "Mr. Wilder does not usually wear a hat."

Then after Mr. Wilder had regained his usual composure, came the real gifts, a beautiful silver coffee urn with an ivory handle on its spigot, a handsome silver table bowl, and a fountain pen desk set, holding a pen with an adjustable point that Mr. Wilder believes he will delight to use.

The silver, of course, will be added to the family collection, but the pen—well, "that's a dandy," says Mr. Wilder.

Vessel room has been booked for export of 500,000 bus. of soybeans via Montreal during the first 10 days of November. An additional 250,000 bus. may soon be booked from Chicago, all to Rotterdam.



S. W. Wilder, Cedar Rapids, Ia., retiring pres., Grain & Feed Dealers National Ass'n, was delighted with gifts presented him at closing convention session.

The National Association at Dallas

Trucking Com'te Report

Chester L. Weekes, of St. Joseph, Mo., chairman of the trucking com'te of the Grain and Feed Dealers National Ass'n, prepared the following annual report:

In order to ascertain the general attitude of the trade, your Com'te on Trucking Competition sent questionnaires to the leading regional, state and group associations handling grain, mill and feed products in various parts of the United States.

We asked for information on what trouble, if any, they were having with the so-called "itinerant trucker." The replies, returned from coast to coast, were all unanimous that the trade is suffering from the unregulated competition of the itinerant trucker, particularly in the coarse grain business, mixed feeds and mill feeds. In almost all instances these reports—after telling of abuses by truckers, fraudulent practices, etc.—ended with a request for assistance in obtaining some regulatory act for this unfair competition.

There is an erroneous idea in some places that we oppose the legitimate bonded trucking companies, or the company-owned and operated trucks. We do not, and the matter must be kept clear. We have reports of many of our own grain companies that have been forced to install their own trucking system, and reports of profitable operation of some of these systems. Likewise mills and mixed feed manufacturers have had to enlarge their facilities and use trucks for their areas.

The term "itinerant merchant" is well defined in the bill passed in the State of Nebraska, Sec. 2 to Sec. 3:

"The term 'itinerant merchant' when used in this Act, means every person, firm, partnership, corporation or association, receiver or trustee buying for the purpose of sale in any form or selling or offering to buy for the purpose of sale in any form or to sell in this state at wholesale or retail any goods, wares, merchandise or chattels of any description and transporting the same by the use upon any public highway of a motor truck or trucks or any other vehicle or vehicles, except as herein otherwise provided. Said term does not include those engaged in the business of transporting property by motor vehicle for hire or operating vehicles in such business as agents, employees, lessees, or contractors, and who do not own the cargo transported, or any interest therein and who do not act for any party in the acquiring, purchase, sale or disposition of the cargo transported. The term 'itinerant merchant' shall not mean nor include, and there shall be exempt from the provisions of this Act the following: (a) Those using such vehicles for the transportation of grain, fruits, vegetables, hay, live stock, or other agricultural products produced by them; (b) Those transporting products owned by them in vehicles owned by them when such transaction is an incident to a business conducted by them, and when such products are being transported to or from an established place of business owned by them. 'Established place of business' shall mean any permanent warehouse, building or structure, at which a legitimate permanent business is carried on as such in good faith and not for the purpose of evading this Act, and at which stocks of the property being transported are produced, stored, or kept in quantities reasonably adequate and usually carried for the requirements of such business, and shall not mean tents, temporary stands, or other temporary quarters, nor permanent quarters occupied pursuant to any temporary arrangement."

ment business is carried on as such in good faith and not for the purpose of evading this Act, and at which stocks of the property being transported are produced, stored, or kept in quantities reasonably adequate and usually carried for the requirements of such business, and shall not mean tents, temporary stands, or other temporary quarters, nor permanent quarters occupied pursuant to any temporary arrangement."

We feel that the railroad companies have not co-operated, and apparently are still indifferent to the demands of the trade for the restoration of transit privileges, reduced rates and general program for combatting the trucking competition evil. Various dealers have pointed out to us the increase in freight rates in their sections of the country, and the resultant loss in tonnage to the railroads with the coming of hard-surfaced roads. It is a well known fact that the railroads, realizing the loss of passenger business the past few years to the motor bus, auto or air transportation, have added new equipment, reduced passenger fares, and have increased this business.

In general surveys which we have made and brought to the railroads' attention, we showed the loss of tonnage of grain from localities, particularly in the middle West where this survey was made; that the restoration of transit privileges would restore millions of bushels of grain to the grain trade and the railroads. We likewise pointed out where two-thirds of the local rate which was in effect, restored business to the railroads, to drought areas in the Southwest, and after discontinuing these rates this business was lost to the grain trade as well as to the railroads.

To all of these appeals they have remained indifferent and we feel that we should endeavor to collect statistical material in an attempt to bring about closer relations and assist in restoring this business to its normal channels.

Quoting Same Price to Truckers—In our survey we likewise have had called to our attention the practice of mixed feed manufacturers and mills of quoting the same price to the "itinerant merchant" as to the established trade. Complaints and suggestions, especially from Eastern and Southern sections, were received, asking that we appeal to these feed manufacturers and mills to protect the established trade, pointing out the investment of millions of dollars in our equipment, our payment of occupational taxes, and the service we render in comparison to the fly-by-night trucker merchant.

In conclusion, we feel that the entire trade is suffering from the competition of the itinerant trucker-merchant, and that the very life of the grain trade depends upon concerted action upon legislation in the various States. We strongly urge that our National Ass'n, working with state and regional ass'ns, take a definite leadership in this matter so that we may eventually bring about nation-wide legislation to curb the unfair activity of these so-called "itinerant merchants."

E. G. Kiburtz, for 25 years employed in the office of the secretary of the Grain and Feed Dealers National Ass'n, has been promoted to sec'y-treas.

Legislative Report of National Ass'n Committee

The report of Geo. E. Booth, Chairman of the Legislative Committee of the Grain and Feed Dealers National Ass'n for 1936-7 follows:

During the past 12 months the most important developments in a legislative way have been new regulations of future trading under the Commodity Exchange Act. Registration of commission men and brokers, segregation of customer funds, special reports, and features having to do only with the conduct of future trading business have added materially to the cost of conducting a business in grain futures and thus indirectly affects the entire system of grain marketing.

Prolonged consideration of the Supreme Court issue in Congress evidently postponed action on what may be termed "new agricultural adjustment legislation" to in a measure take the place of the Agricultural Adjustment Act which was declared unconstitutional. Soil conservation, ever normal granary, are prominent features under consideration for control of the production and prices for farm products.

This month in different parts of the United States the sub-committee of the Senate Committee on Agriculture will have hearings ostensibly "to determine what farmers want in the agricultural legislation which will be discussed at the next session of Congress." During the months past there has been a difference of opinion expressed between farm organizations as to what type of legislation would benefit agriculture the most. While for the most part wanting to retain Government subsidy or patronage there appears to be among the farm groups a swing against control of production.

There are many subjects for proposed legislation in which our members as good citizens are vitally interested. We are concerned about wage and hour standards, attempted changes in the judiciary, particularly the Supreme Court, but obviously we, acting as an Association, must confine ourselves to matters pertaining directly to the grain business and on which we can be almost unanimous.

Crop control comes very close to grain handling and the ever normal granary would naturally include consideration of facilities privately owned and maintained by the individuals in the grain trade for the storage and

[Concluded on page 365.]

Officers and Directors Grain & Feed Dealers National Ass'n—1938



Front row, left to right: G. G. Steere, Van Nuys, Cal., and J. A. Linderholm, Omaha, Neb., directors; S. W. Wilder, Cedar Rapids, Ia., retiring pres.; E. H. Sexauer, Brookings, S. D., first vice-pres.; O. F. Bast, Minneapolis, Minn., pres.; Frank A. Theis, Kansas City, Mo., second vice-pres.; F. E. Watkins, Cleveland, O., director and chairman of the executive com'te; C. G. Robinson, Memphis, Tenn., and H. H. Green, Pattersonburg, directors.

Back row: R. B. Bowden, St. Louis, Mo., executive vice-pres.; Directors J. H. Caldwell, St. Louis, Mo.; S. L. Rice, Toledo, O.; Sam P. Mason, Sioux City, Ia.; F. E. Gillette, Nashville, Tenn.; Rees Dickson, Louisville, Ky.; R. C. Booth, Cedar Rapids, Ia.; F. J. Faber, Philadelphia, Pa.; J. V. Lauer, Milwaukee, Wis.; Ben Feunquay, Enid, Okla.

Profitable Hedging for Country Elevator Operators

By W. H. ALLEN, Manager Square Deal Grain Co., Morris, Ill.

[Continued from page 158, Aug. 25, and page 250, Sept. 23 Journals]

Shipping Out Stored Grain

In auditing books for the different elevator companies over the country we have found another kind of a hedger, who has left some sorry tracks behind him. This is the man who ships out the stored grain and tries to buy it back in the options. On this same seven years the average for the entire time would work *this* way, if the cash oats had been shipped out and sold on the spot market and repurchased in the May option in the month of September each year:

	Per Bu.
Cash oats would have sold in Chi. in Sept. on the spot market @	43c
Repurchased or paid the farmer for them the next May on the basis of the spot market @	47½c
Loss in the cash oats	4½c
May options bot, as soon as the cash was sold in Sept., in making the hedge @	49½c
The same May option sold out as soon as you settled with the farmer the following May @	44c
Loss in the option	5½c
Plus your loss in the cash of	4½c
Makes a loss on the deal of	10c

Now why? Because in September he sold the oats at 6½c under the option and in the following May he paid a premium of 3½c over the option to settle the trade.

The only time to make this kind of an option hedge is when you can ship out the cash oats and buy the futures at a discount under the spot cash. Which does not happen very often in harvest time. As an example we will take the old corn in July, 1931.

On the last days of July we had a very erratic corn market. In the last five days cash corn in Chicago swung from 58 cents to 71¾.

Supposing you had seen an opportunity like this was, to ship out the stored corn and replace it in the September option.

On this deal you would have sold out your stored corn for an average of say 68 cents spot Chicago, immediately you could have replaced it in the September option for 50 cents or at a discount of 18 cents per bushel. Here is discount enough really to seem to make it worth while.

Suppose your farmer patrons held on to this corn until some time in September. The average cash price for the month of September was 43 cents per bu. spot Chicago. Your average September option for the month was 41 cents.

Summing the deal up this way:

You bought your Sept. option @	50c
And you sold it back on the average of	41c
Or at a loss of	9c
But: in July you sold out this cash corn for	68c
And bought it from the farmer in Sept. for (spot Chi.)	43c
At a profit of	25c
Less your loss on the option of	9c
Making a clear profit of	16c

Now in shipping out stored grain like this it is very dangerous and most times very disastrous unless you have a very wide discount under your cash market.

Premiums on cash corn fluctuate rapidly. Maybe today you are buying corn at 5 cents under the leading option and in a week it might be 2 cents over the option. If you had shipped out stored corn and replaced it in the option the change in the basis or the premium over or above the option might lose you plenty of money. If the cash and the options always worked together it never would be any trouble

to make hedges. But we know from experience that they do not.

We might ship out high priced corn, like it was in the fall of 1929, and make lots of money on a hedging deal but we would get plenty of experience too in putting up margins when the option dropped 30 cents per bushel.

We are inclined to think some times when we lose 30 cents per bushel on the options that that would be terrible. But—if we are making it back in the cash grain the loss is not disturbing.

In September, 1929, the average spot price for No. 2 corn in Chicago was 94 cents, ranging from 83c to \$1.05. Supposing you shipped out the stored corn and purchased the May option at 89c, which ranged from 79 to 99 cents. On this deal you sell your cash corn for 94 cents spot Chicago, and buy back your May option at 89c, or at a discount of 5c, instead of a premium.

You would have carried that May option trade of 89c until this May, when the farmer sold you the corn which he had previously stored with you, being worth on the spot market in Chicago at this time 56 cents.

Last Sept. you received for this cash corn, spot	94c
And now you are settling with the owner for spot	56c

You have made on this cash corn	38c
On your May option which you purchased last Sept. @	89c
You sell it out for	59c

Or at a loss of	30c
Which has to come out of your profit on the cash of	38c

Leaving you a profit on the deal of 8c

There are times in the year when we can use our available storage space to a good advantage by buying grain some weeks prior to the delivery month, holding the cash grain in our elevator and selling the option and then waiting until the cash grain or spot market in Chicago sells even or to a premium with the option and then closing out both deals.

I have often tried to explain these different methods of holding grain and shipping out stored grain by this little illustration:

Supposing that I ship 5,000 bus. of corn to a Chicago firm and they sell it out on the market there for me at say 52c. I have instructed them to buy the most distant future for me as I want to hold this corn for about 3 or 4 months, thinking that the market is going to get better. The commission firm buys the July or the September option for me at about 8 or 10 cents above the cash market.

Couldn't they hold this identical 5,000 bushels of corn I just sold until this delivery date and deliver it back to me and make a good carrying charge by just sitting and waiting?

If we ship out stored grain we must buy these options at a good discount under our cash sales or the other man will make the profit and not we.

* * *

The market is not available for hedging purposes at all times. If the options and the cash spot market are too close together we can only sell our cash grain as there is no carrying charge.

These are a few of the things a grain man learns from actual experience. There is no text book on this line that I have ever found. Sometimes experience is a dear teacher and I have paid for my experience the same as other dealers.

Driveway Observations

BY TRAVELER

ELEVATOR MANAGERS who do an extensive business in handling merchandise for the farm trade are less inclined to cut their grain handling margins to build up a volume of business in grain than are those who depend entirely upon the grain they handle for their livelihood.

To the dealer who gets 20%, 25%, 35% margins on items sold to farmers at retail, a 2c or 4c margin on a bushel of wheat does not look like a fair return for his large investment in capital, time and equipment, considering the hazards of grading, shrinkage, shipping and the fluctuations of the market. Consequently he will not attempt to market grain on a slender margin. He gets the merchant's attitude. He wants business in grain, but he wants it on a safe margin.

* * * * *

A NORTHERN INDIANA grain dealer conceived the idea of making one dust collector work for both his grain cleaner and his corn cleaner.

"The air outlets are not big enough," he remarked, "to handle both machines at the same time. But I never have to operate both machines at the same time, so the single collector works quite satisfactorily."

* * * * *

TO MEET his peak demand for grinding service, one Indiana grain dealer conceived the idea of installing an additional medium sized hammer mill as an alternative to replacing his one hammer mill with a large size machine that would handle the business as fast as it would come in.

"If the two medium sized mills could be hooked up to work together from a single garner bin," he thought, "and perhaps blow the meal thru a single pipe into a large meal collector, it seems that the two mills, working together, should turn out grinding as fast as a single large mill with a single motor of a horsepower equal to the two motors on two medium sized mills."

"Such an arrangement, with a butterfly valve at the junction of the spouts from the garner bin, would make it possible to operate only one of the mills when the demand for grinding is light, at a saving in power costs. Further, should one grinder motor burn out, grinding service would be retarded only, not stopped completely."

* * * * *

A CLEVER VISUAL aid is a small panel of very heavy glass in the workfloor of the elevator of the Pioneer Elevator Co. at Pioneer, O. This glass panel, strong enough to stand the abuse of men stepping on it, and heavy hand trucks loaded with feed being trundled across it, is located above the belt drive and the feed throat of the hammer mill in the basement. The glass is clear, so both the hammer mill belt and the feed of grain into the mill may be seen from the workfloor, saving the time and effort of an operator previously spent in chasing from the workfloor to the basement to check the feed setting and operation of the grinder.

Less than an arm's length from this glass floor panel is the control for the feed into the grinder, and the clutch lever for putting the grinder into operation. So the grinder is easily controlled from the workfloor. Only when screens have to be changed does a workman have to go down into the basement.

Also close by on the workfloor is the one-ton vertical feed mixer. The man at the mixer looks after the operation of the grinder. The Pioneer Elevator Co. uses diesel power, operating machinery from a long line shaft in the basement.

Telegraph messages now may be sent with the usual marks of punctuation, including comma, colon, dash, parentheses and the question mark, and will be paragraphed if so sent, by the Western Union and Postal Telegraph Companies. The "stop" has been discontinued.

Truckers Rob Credulous Grain Dealer

A victim of 23 swindling truck owners and shrewd drivers who employed a dozen trucks and a brace of feminine wiles to defraud him, 67-year-old Manager Edgar O. Martin of the Weldon Grain Co., Weldon, Ill., is reported to have lost more than \$13,000 worth of corn and oats in a period of 30 days, while working on a 35,000 bu. cribbed storage addition to the company's 50,000 bu. elevator.

The shortage is said to have been discovered recently when Manager Martin gave orders to load out a car of corn.

When the bins were opened and the machinery started little more than 90 bus. of corn poured from the loading spout before it ran dry. Investigation disclosed that the bins were empty.

Manager Martin was very much concerned with construction of the 36x30x42 feet high storage addition in the daytime when the truckers wanted to haul, vigorously clamoring about the job, and nailing down the 2x6s and 2x4s that make up the four flat bottomed bins. Stopping to load trucks was a bit of a nuisance, so he quite willingly fell in with the suggestion of several of the truckers that they come at night for the loads of oats and corn they wished to buy. Besides, it is reported Mr. Martin was having enough trouble with one of the company's directors, who objected to flat bottoms and green lumber for soybean storage bins.

So hard working Manager Martin dutifully returned to the elevator after his evening repast each night to spend four or five hours loading the trucks that began to gather at his office soon after the shades of night appeared.

When the trucks were weighed the scale beam always came to a proper balance. Of course, it was awfully dark outside, and it did seem funny that some of those big trucks were carrying hardly more than 100 bus. of corn or oats.

The story started to leak out when the elevator managers in the vicinity of Jacksonville reported truckers pulling into their driveways and offering grain under the market. Sheriffs' offices were notified. Calls to elevators about the country failed to reveal any shortages, however, until Manager Martin ordered a car of corn loaded out.

Learning about this shortage, De Witt county's Sheriff J. E. McMurphy's officers, acting on the tip about grain sales to elevators in the Jacksonville territory, suggested an audit of the Weldon Grain Co.'s weight tickets. The audit revealed a shortage of 20,862 bus. of oats and 6,888 bus. of corn, valued at \$13,000, according to Deputy Sheriff Claude Barrett, and directors of the grain company.

Doc Halcom, a director, is reported to have pushed the case against the truckers. Warrants were sworn out for the arrest of more than 20 of them, when early confessions from first arrests implicated the others. Ten were arraigned Oct. 11 at Clinton, Ill., including Rea Gibson, Waverly; Lindell Pritchett, Jacksonville; Miss Dorothy Sparks, Franklin; Ronald Tannahill, Jacksonville; Charles Miner, Jacksonville; Wendall Hayes, Jacksonville; Warren Woods and Mrs. Myrtle Woods, his mother, both of Franklin; Leslie Tannahill, Ernest Leadill, Carl Meyer and Holland Evans, all of Jacksonville. Costs of \$36 were assessed against each of the 10, who were then released on their own bond, and ordered to re-appear in court on Oct. 23.

On Oct. 13 several more truckers were arraigned, including Huel Baker, Milton Cahoon,

Abraham Dodsworth, Raymond Knifley, Gerald Meyers, Francis Tannahill, Goldie Evans, Ida Evans, Oliver Hockings, Earl Lovell, William R. Haines, Fred Landis and Guy Martin, all of Franklin. This group appeared voluntarily for hearings, were assessed costs of \$23.40 each, and the cases against Mrs. Goldie Evans, Haines, and Landis were dismissed on their claim that they had not trucked any grain from Weldon "since June 29." Wayne Peebles, Harold Peebles, and Henry Shenneman were the last of the defendants to be arraigned at Clinton in the cases of the People of the State of Illinois vs. the truckers named.

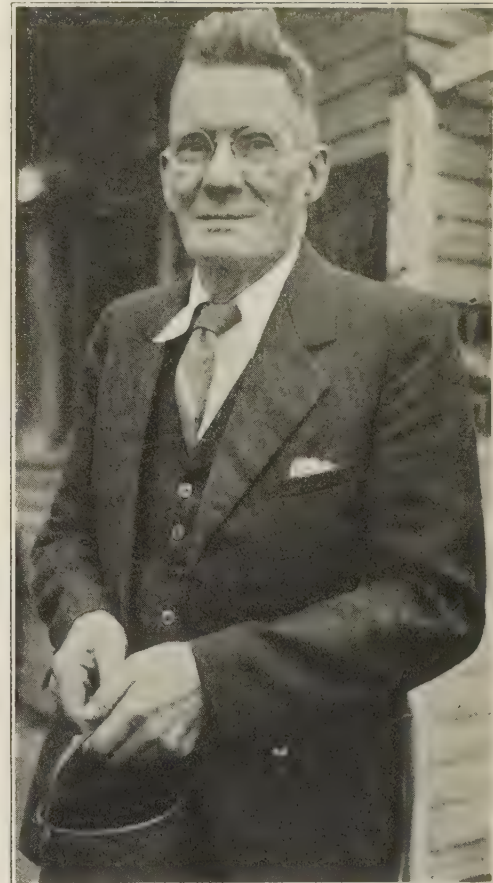
Altho Deputy Barrett declined to explain just how the Weldon Grain Co.'s loss was discovered, he explained that it had been the custom of persons buying grain at the company's elevator to load at night, and to weigh with two wheels of the truck off the scale deck. With the help of one of the gang, it is alleged, they were able to get away with payment for only a small portion of the actual load. (The scale shed is quite narrow and Manager Martin states the scale deck is 18 ft. long.)

A motion for probation was continued to Oct. 23, when Manager Martin and several of his directors appeared at Clinton, confronted the truckers with evidence of loss, largely estimated, except for the audited shortage that showed the total. It is understood that an agreement was reached whereby the truckers would make restitution in so far as possible, and the confessed thieves were released on probation. Paul S. Fenstermaker, Waverly, attorney for the truckers, is understood to have pointed out that pleas of guilty could be withdrawn and the truckers could stand trial; and that the grain company suffered from a sad lack of legal evidence against them.

After the conference Manager Martin was heard to woefully admit: "We reached a compromise. The truckers are supposed to make restitution. But much of the money is already gone, and we can expect to receive back very little of our loss."

Sheriff J. E. McMurphy says, "Operators of all elevators in Dewitt county are being warned to close their places of business at night. They should also know their customers before they accept checks."

The Weldon Grain Co. purchased 105,000 bus. of oats from farmers and as Mr. Martin wanted to move this grain to make room



Manager Edgar O. Martin of the Weldon Grain Company.

for other crops, he was selling it to truckers as he was able to get a little better price.

Trucking grain merchants are so full of devious tricks it behooves elevator operators, who dare to deal with them, to watch every move.

The Supreme Court of the United States announced Oct. 25 that it would not grant a rehearing of the suit attacking the constitutionality of the Commodity Exchange Act filed by partners of Jas. E. Bennett & Co., F. S. Lewis & Co., Uhlmann Grain Co., Bartlett Frazier & Co., and other members of the Chicago Board of Trade.

Winnipeg, Man.—Regulations to limit excessive speculation in grain are not needed, declared Major H. G. L. Strange, research director of the Searle Grain Co., before the Turgeon Royal Grain Commission, Oct. 19. Except for one occasion in 1929, he said, he has been unable to find excessive speculation operating on the Winnipeg grain exchange.



(1) The Weldon Grain Co.'s Elevator, with 35,000-Bu. Cribbed Storage Addition (2) Covered, 18-ft. Deck of 10-Ton Scale, on Which Trucks Were Weighed

Improved Construction of Cob Burners

With a large crop of corn rapidly maturing and an active demand keeping prices above normal figures, the new grain should move to market with a rush. Naturally enterprising elevator operators of the corn belt are preparing to handle the new crop efficiently and expeditiously. Many are greatly enlarging their grain receiving, shelling and handling facilities and some are installing improved driers.

Fires in cupolas are known to be started frequently by sparks from cob burners, and every year several country elevators are sacrificed to poorly constructed cob burners. The last elevator to burn as the result of sparks from the cob burner was the well equipped house of the Glenarm Grain Co., at Glenarm, Ill. This fire was discovered by elevator workers who were repairing the roof. When they noticed smoke coming from the east side of the cupola just above the spout leading to the cob burner, they rushed to the earth and sounded an alarm, but too late.

After careful investigation and study of the fire hazards of cob burners and their connection, the Mutual Fire Insurance Bureau has designed a practical and durable burner that should receive a warm reception from all elevator owners of the corn belt. The Bureau's construction recommendations following are worthy of the thoughtful consideration of every elevator owner and their adoption should correct the known fire hazards of cob burners as well as reduce the fire losses and cost of fire insurance in the mutual companies:

The cheapest burner is one that will stand for years without repairs other than occasional replacements of the lining. For that reason, it is a mistake to attempt to reduce the first cost of a burner through the use of inferior materials or employment of unskilled labor.

A cob burner is just as much a part of the equipment of a corn elevator as is the elevator leg and to function properly it must be well built. Attempts to build cheap burners are usually expensive in the long run, unsatisfactory, and frequently introduce unnecessary fire hazards to surrounding property.

The spouting of dust to a burner is permitted only when an all-metal collector of the cyclone type is provided in the exhaust system from the cleaner. Such a collector should not be placed on the inside of a building.

The burner should preferably be so located that prevailing winds will tend to blow sparks away from, rather than toward, the main plant. There should be at least 40 feet of clear space between the burner and combustible buildings.

Construction of Burner: Substantial footings are necessary to avoid wall cracks due to settling, these should be laid on solid clay or hard pan below the frost line.

A trial batch of concrete should be mixed, using one sack of Portland cement with 6 gallons of water and into this add $2\frac{3}{4}$ cu. ft. of sand and 4 cu. ft. of pebbles. If this produces too wet a mixture add more sand and pebbles slowly until the right degree of wetness is obtained. If the trial mix is too stiff cut down the amounts of sand and pebbles in the next batch but do not change the proportions of water and cement as the strength, durability and watertightness of concrete are dependent upon the proportion of water to cement.

The outer wall of the burner should be constructed of hard-burned brick laid in rich lime mortar. The inner wall or lining should, preferably, be of fire brick. Common soft brick may be used for the lining but will require more frequent replacement. The lining should be laid in fire clay. Bricks should be well saturated with water before being laid in the wall, thereby avoiding absorption of water from the mortar. It is the water that causes mortar to set and harden.

The lining is to be built up independently of the outer wall with a 2-inch air space between. This space is for insulating the outer wall,

thereby avoiding cracks due to rapid temperature changes. Circulation of air through this space is provided by placing either building tile or field drain tile at intervals in the outer wall. The number of tiles to be used will depend upon their size, ordinary round 4-inch tiles should be placed 3 feet apart in staggered rows 18 inches apart, about 6 such rows being sufficient, the first being at or near the ground. If 4x12 building tiles are used, they may be 6 feet apart, the rows being 18 inches apart. A large number of smaller ventilating openings than fewer large ones is preferable.

To provide the necessary reinforcement for the walls of the burner, it shall be banded by strap iron bands 3 inches wide by $\frac{1}{4}$ inch thick. These shall be provided at intervals of 5 feet in the height of the burner beginning at a point 5 feet above the foundation.

Air for combustion enters the burner through the manhole and through the three air intakes, placed equal distances apart, provided at the grade level. The manhole should be about 24x24 inches while the air intakes will vary from 12x12 inches to 12x24 inches (the 24 inch dimension being horizontal) depending upon the size of the burner.

New burners should not be used until the walls have become thoroughly dry. Do not attempt to hurry the drying process by building a fire in the burner. Subjecting damp walls to intense heat is certain to result in cracking. This follows because the moisture in the walls will turn to steam and steam will soften mortar.

Screen Top of Burner: It is recommended in all cases (and under certain conditions it may be required) that the top of burner be screened with wire screen of not larger than $\frac{1}{2}$ inch mesh.

The most satisfactory method of screening is to bolt together suitable lengths of 2 inch angle iron, leg to leg, and lay this across the top of the burner at intervals of 36 inches. In this position, wire cloth of 36 inch width may readily be attached to the angles with short pieces of wire.

The most suitable kind of cloth for this purpose is one made of wire that has a baked porcelain enamel covering.

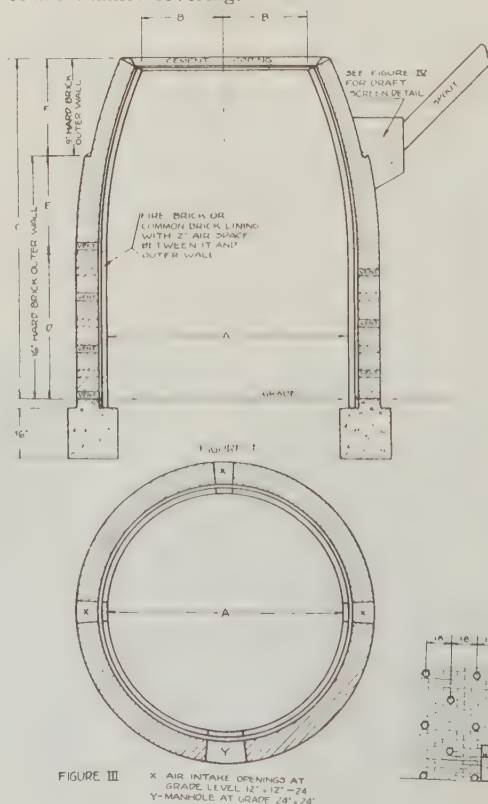


FIGURE III

X AIR INTAKE OPENINGS AT GRADE LEVEL 12" x 12" - 24" Y-MANHOLE AT GRADE 24" x 24"

Openings for cobs or dust should be located not lower than one-half or higher than two-thirds the height of the burner.

Draft screens shall be provided at each cob or dust opening. These shall be constructed as described in figure IV. The general idea of this arrangement is to prevent back draft that might carry sparks up the spout and at the same time to avoid cross draft and spillage of cobs or dust. Under no circumstances are the normally open sections of a draft screen to be enclosed with sheet metal, wire mesh screen, or other material that would obstruct the free passage of air.

Spouts shall be of metal. No spout may extend over the top of the burner or project within 15 inches of the outer wall. The lower ends of cob or dust spouts must be so cut back that the orifice will be perpendicular to the ground. The lower end of the spouts must be located with respect to the draft screen on the burner as described in the foregoing.

To insure free movement of material, a cob or dust spout should be inclined at an angle of *not less than 45 degrees*, and to avoid a chimney effect, they should be inclined at *not to exceed 50 degrees*. Spouts should be so put together and set up that the lap of the sections will not offer any obstruction to the movement of material down the spout, that is, the upper sections should fit *inside* the adjoining lower sections.

When the point from which the cobs are spouted is so located that a straight spout to the burner would be at an angle of less than 45 degrees (as might be the case where elevator is unusually low), a belt or chain conveyor should be utilized to deliver the material to a point from which it can be spouted satisfactorily. There shall be no combustible material used in either the conveyor housing or its supports within 20 feet of the burner. The conveyor should not extend over or into the burner.

When a point from which the material is spouted is so located that a straight spout to the burner would be at an angle of *more than 50 degrees* (as might be the case where elevator is unusually high), the spout should be run down the side of the building to a point from which it can enter the burner at an angle of between 45 and 50 degrees.

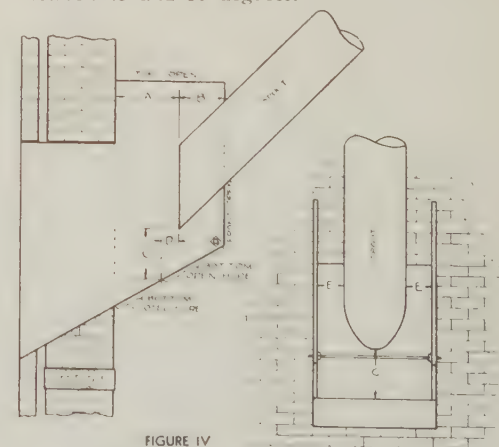


FIGURE IV

A END OF SPOUT TO SIDE OF BURNER - AT LEAST 15"
B SCREEN SHOULD EXTEND AT LEAST 18" BEYOND EDGE OF BURNER
C LOWER ENDING OF SPOUT - LINE AT LEAST 1" VERTICALLY ABOVE EDGE OF HOPPER
D 1/2" x 1/2" x 1/2" SPOUT TO BE AT LEAST 4" HORIZONTALLY FROM EDGE OF HOPPER
E SCREEN SHOULD BE TO SIDE OF HOPPER TO BE 4"

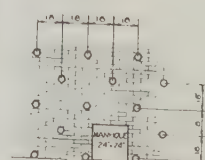


FIGURE II

The Proper Construction of Cob Burners.

SPIGOT WEIGHTED	A	B	C	D	E	F
UP TO 100 BU	10	5	4	6	0	4
100 TO 1000 BU	11	5	7	0	0	4
1000 TO 10000 BU	12	5	10	0	4	4
10000 TO 100000 BU	13	5	14	0	5	5
100000 TO 200000 BU	14	5	20	0	5	5

All cob spouts (including those which are fed from a conveyor located outside of buildings) and all dust spouts shall be provided with normally closed dampers or automatic valves. These dampers may be located at any point in the spouting except that it will be found preferable, in cases where dust collectors are used, to place the damper in the wind trunking between the cleaner and the collector at or near the point where this trunking passes through the building wall.

The area surrounding the burner should be covered with gravel or cinders to a depth that will prevent the growing of grass and weeds.

Do not use the burner as a storage place from which cobs may be taken for fuel as the careless removal of cobs is likely to result in damage to the burner and almost certainly will result in a spreading of litter about the premises.

Valves placed in the spout to burner for diverting cobs to loading chutes become clogged and serve to slow up the normal movement which results in spillage at the end of the spout.

Legislative Report of National Ass'n Committee

[Concluded from page 361.]

handling of grain. We will insist that the property rights and business privilege of private owners be given consideration in connection with any Federal plan for the housing of surplus grain.

In recent years what appears to have been unfortunate crop curtailment along with drought and crop losses from other reasons has seemed to show the fallacy or impossibility of anything like definite crop control measures but the plan still persists in high places.

Through your membership on the National Grain Trade Council, which maintains a Washington office, your chairman has kept in close touch with legislative developments. This Council unites most of the Exchanges and our National Association for action on problems having largely to do with legislation and developments in Washington.

With the fine leadership of our Executive Vice-President, Mr. Bowden, 21 State and Regional associations are now affiliated with our National Association. Thus we represent 4000 country dealers and through them contacts with many thousands of farmers. We are growing stronger as an Association and without any reference to politics we must use our strength and influence toward a sound, practical national policy in agriculture and measures affecting the storage and marketing of grain.

Poland, which is usually the most important rye exporter, has no real surplus this year tho it is possible that small quantities will be exported at the expense of domestic needs in order to relieve market congestion during the heavy fall marketing period, and in order to help somewhat in the present unfavorable foreign trade outlook for 1937-38. An exportable surplus from the Danube region of around 7 million bushels is estimated compared with exports during the past season of about 10 million bushels.—Buro of Agricultural Economics.

Birtle, Man.—Samuel Larcombe, 86, winner of 3,000 prizes for farm products in 43 years of farming on the land he homesteaded near here in 1889, died Oct. 20. A long series of showings in International grain exhibits was climaxed in 1917 with his winning of the World Wheat King title in the International Grain Exposition. Greatest of his achievements was development of a rust-resistant variety of wheat in 1912, which he named Axminster for the Devonshire town near which he was born Apr. 9, 1851. Last spring the Manitoba legislature adopted a resolution extending greetings to Mr. Larcombe on his 86th birthday and expressing the appreciation of the province for his valuable services to agriculture.

Vacuum Drying of Grain

Moisture can be driven out of grain by heating it to the boiling point of water, 212 degrees, but no one would attempt to do so because the grain would be so thoroly cooked as to be worthless for most purposes. Driers now in use hold the temperature far below that point to avoid damage to the grain, while the moisture passes slowly from the center of each kernel to the surface which is acted upon by a large volume of warm air to evaporate the water.

It may seem a novel method actually to boil the water out of the grain at a low and safe temperature; but it has been done by conducting the operation in a vacuum, which lowers the boiling point of water to 79 degrees. The vacuum method of drying grain is described as follows by David Dalin of Milwaukee.

In Sweden some 10 years ago there was developed a new system for drying, conditioning and tempering grain under high vacuum. This system has proved practically 100% perfect in fulfilling a number of requirements, and as a result numerous installations of this kind are now in operation, particularly in Scandinavian countries.

The equipment consists of an oscillating drum which is connected to a condenser by means of a flexible vacuum-tight tube, the latter in turn being connected to a vacuum pump. From overhead hoppers the grain is loaded into the drum through openings in the drum shell, and, when filled to the proper degree, the filling openings are hermetically sealed with quick closing covers. The vacuum pump is started and the drum evacuated to 29-in. vacuum (1 in. absolute pressure), whereupon heat in form of steam or hot water is applied to the heating tubes inside the drum.

The temperature of the grain is thus quickly increased, and as soon as it reaches the boiling temperature of water under the prevailing vacuum (79° F. at 29-in. vacuum) the water in the grain forms into steam very rapidly, escaping into the condenser where it is condensed.

Quick Drying.—Approximately 35 min. of actual drying is required to reduce the moisture in wheat from 17 to 12%. As the wet kernels give off their moisture more rapidly than the drier ones, due to higher hygroscopic resistance in the latter, an equalization of the moisture content in the various kernels takes place, so that when 12% is reached there will be, thruout the whole grain mass, a practically 100% homogeneous dryness. The oscillating motion of the drum (one revolution in each direction at the rate of 2 r.p.m.) keeps the grain in an even and gentle agitation, giving to each kernel the same treatment and contact with the heating surfaces. This is very important.

Hygroscopic resistance in the kernels retards the dehydration, and it is therefore possible, by supplying more heat to the grain than can be carried off by the evaporation, to increase the temperature in the grain above that corresponding to the prevailing vacuum. Consequently, towards the end of the process almost any desired temperature in the grain mass can be obtained. Neither high vacuum nor high temperature will completely overcome the hygroscopic resistance to evaporation, even though a high vacuum will greatly facilitate and shorten the drying process.

Of importance, however, is that while the grain is wet the drying should be done at a low temperature, because the grain is more sensitive to heat the wetter it is. As the grain gets drier, the temperature may be increased without danger. With this method, the temperature can always be regulated to comply with ideal requirements, depending upon moisture content, the kind of grain, and the results one desires to obtain.

Kills Insects.—In the treatment for insect infestation, it is sufficient if the grain reaches a temperature of 115° F. at the end of the treatment and that this temperature is maintained for a few minutes. All grain so

treated has been found free from living insects, including their eggs and larvae.

Even if the grain is already sufficiently dry, it should still be treated in this manner for prevention of infestation. In that case, no moisture need be removed. Drying is prevented by simply closing the valve between the drum and the condenser as soon as 29-in. vacuum is reached. Sufficient heat is applied for the grain to reach 115° F., which temperature is maintained for 30 min., when all the grain will be free from insect life.

Water can also be added to the grain, as is the case in wheat tempering under vacuum. This also is accomplished in about one hour's time. The sterilizing effect of the vacuum tempering process is the same as for the drying process. None of these treatments will damage the grain.

Drying without Cracking.—This method prevents hard surface drying, so that the interior of the kernels has practically the same moisture content as the outside surfaces at all times. There is no checking, cracking or shriveling of the kernels. Even green peas, which always shrivel up under ordinary atmospheric drying, will maintain their shape perfectly when dried under high vacuum and come out of the driers like perfectly round balls. Under high vacuum we experience no difficulty in drying down from any moisture content to any moisture content in one operation without overheating, checking or in any way damaging the grain. We have dried corn from as high as 45% moisture to as low as 10% in one operation, without checking or loss of luster.

Atmospheric hot air driers have to depend on slow diffusion to bring the moisture from the interior of the kernels to the surface, as water, under atmospheric pressure, does not boil below 212°. Consequently, the surface is usually dried to a very low moisture content while the interior is still quite wet. This sets up stresses which, particularly in corn and rice, cause cracks, checks and surface burns.

It sometimes takes days before the inside moisture is equalized with the surface moisture. Therefore, grain dried under such conditions has a great tendency to absorb moisture from the atmosphere, because the kernel surface is "bone dry," even when the average moisture may be such that a practical equilibrium between the grain and the atmospheric moisture should exist. This tendency is much less in vacuum dried grain because there is practically no difference between the interior and surface moisture content of the kernels. In other words, the outside is not over-dried while the inside is still wet.

From Abroad

Total exports of Manchurian soybeans, bean cake, and bean oil from October to August, 1936-37, amounted to 3,073,000 short tons compared with 3,050,000 tons for the corresponding period in 1935-36. Slightly over 50 per cent of the Manchurian soybean exports were shipped to Europe, largely to Germany.

The 1937 wheat crop of China, Manchuria and Japan is estimated at 730,000,000 bus., compared with 871,000,000 bus. in 1936, and with 1931-35 average of 859,000,000, according to reports received by the Buro of Agricultural Economics. Despite the smaller total wheat crop this year it is practically certain that wheat and flour imports by China, Manchuria and Japan during 1937-38 will be kept at a minimum, the Buro said.

Alec Slater, grain dealer of Liverpool and Ainslie D. Fairclough, miller of Harrington, Eng., on their recent visit to Argentina were taken by the Grain and Elevator Commission on a planned tour, covering Rosario, Cordoba, Villa Constitucion and San Nicolas, as well as the Ministry of Agriculture's seed stations at Pergamino and Manfredi, and also Bahia Blanca, Necochea, Mar del Plata, and the La Prevision seed station at Tres Arroyos.

Grain Carriers

The Associated Traffic Clubs of America held their annual convention Oct. 13 at St. Louis, with 925 registered, representing 73 clubs.

Reflecting the great demand for ocean transportation, on July 1 only two British tramp ships were laid up, compared with 126 in April, 1935.

No. 26809, Southwestern Millers League v. A. T. & S. Fe has been dismissed by the I.C.C., thru rates on wheat milled in Kansas and Missouri and products shipped to Tennessee and Alabama held not unreasonable.

Grain and grain products were loaded into 35,823 cars during the week ending Oct. 9, against 30,054 cars so loaded in the like week of 1936, as reported by the Ass'n of American Railroads.

The Railroad Commission of Texas held a hearing in Austin Oct. 22, in Capital Bldg. on emergency reduced rates on live stock feed to those certain counties in Texas previously named.

Buffalo, N. Y.—A proposed revision of feed transit rules in Official Classification Territory has been announced by the railroad companies, effective Jan. 1, in the interest of uniformity.

Alton Railroad Co.'s tariff No. 1570-N, Ill. C. C. No. 85, and Supplement No. 23 to tariff No. 1700, Supplement No. 18 to Ill. C. C. No. 67, effective Nov. 15, provide changes in rules governing transit privileges on grain and grain products.

"There is a growing acknowledgment on the part of the public that the Inland Waterways Corporation, as a pioneering and demonstrating agency, has actually fulfilled its mission, and should now pass into the hands of private capital."—Major General F. Q. Ashburn, pres.

I. & S. No. 4280 has been dismissed, the Interstate Commerce Commission holding it had no jurisdiction over the port to port water rates proposed by the Inland Waterways Corporation on grain and soybeans and products from St. Paul, Chicago, Kansas City, Cairo and intermediate ports, to river points south of St. Louis, effective Oct. 15. The Commission refused to give the Federal Barge Lines an advisory opinion, the St. Louis Merchants Exchange and the railroads objecting, as the proposal would disrupt the present equalization of rates on grain thru Ohio and Mississippi River crossings.

Washington, D. C.—The Interstate Commerce Commission on Oct. 22 granted the railroad companies an increase in rates on coal, iron and iron ore, lime, cement, plaster and petroleum that should give them \$47,000,000 more revenue annually. The proposed increases on foods, farm products and other commodities are still under consideration. Commissioner McManamy criticized the Commission finding for its failure to consider "important and pertinent facts, such as wage adjustments, which will add substantially to the carriers' expense burden." Failure to give official recognition to these facts at this time, he said "will simply result in forcing another hearing in the immediate future which, in the public interest, ought to be avoided."

Soybeans Hard and Dry

By the ELEVATOR SUPERINTENDENT

The new soybeans coming in are hard as marbles; moisture running between eight and nine per cent. That is swell for a storage proposition but the blooming beans with all their Far East cunning, offset that nice happenstance in a tricky sort of way.

Because of their dryness the beans this year are hard as nails and as soon as they are handled once or twice, they pick up so much foreign material they jump into grade four quicker than a Mexican jumping bean could hop.

The main thing for a super handling of these rascals this year is to watch out for anything lower than 12.50 moisture, and if he gets a run of stuff at a lower figure, cushion it thru all the handling, screen it twice, and pray!

National Soybean Processors Elect Officers

E. F. Johnson of St. Louis, Mo., widely known soybean authority, was elected president of the National Soybean Processors Ass'n, at Chicago, Oct. 22, succeeding I. C. Bradley of Taylorville, Ill., who had served for two years.

H. D. Egly, Fort Wayne, Ind., was named vice pres., Earl W. Myers, Clinton, Ia., sec'y, and W. G. Dickinson, Chicago, treas.

Mr. Johnson began the study of soybeans as an undergraduate at Purdue University after having received his A.B. degree at Indiana State University. Both his bachelor and master theses at Purdue University were on factors influencing protein content of the soybean. At the Johnson Seed Farms,

Stryker, O., he grew the largest acreage of soybeans and varieties in the United States in 1922, the total reaching 650 acres.

For four years Mr. Johnson taught agricultural education at Ohio State University, where he acquired the sobriquet of "Soybean Johnson" thru his intense enthusiasm for the future of the product in this country. He visited all the important European countries last year to make a first-hand study of the place of soybeans in their feeding programs. He is associated with the Ralston Purina Co., of St. Louis.

How to Use Table for Loss in Drying

The figures 11 to 33 at the heads of the columns are the original moisture content before drying.

The figures in left-hand column, 1 to 25, represent the difference in the moisture percentage of the sample before and after drying. These figures show by how much the moisture test has been reduced by drying.

The figures in the body of the table are the percentage of loss in weight when dried down to the reduced test by the amount shown in column at left.

For example, a sample of corn containing 20 per cent moisture is run thru the drier. When tested after drying it shows 15 per cent moisture. This reduction from 20 per cent to 15 per cent is shown in the column at left as 5. Following the figure 5 along the line to the right to the 20 per cent vertical column we find 5.88, and that is the percentage of loss of weight of the grain.

In other words: Starting with 10,000 pounds of corn containing 2,000 pounds of water we end up with 9,412 pounds of corn testing 15 per cent moisture and of which 1,411.8 pounds is water.

Off hand and without giving it any thought one would suppose that a 5 per cent reduction on 10,000 pounds would leave 9,500; but a sample of corn weighing 9,500 pounds and containing 1,500 pounds of water would test 15.78 per cent moisture. To bring the test down to 15 more than the 500 pounds of water will have to be taken out of the grain, 88 pounds more in fact, which of course cuts 88 pounds from our 9,500 pounds of grain.

We started with 8,000 pounds corn (dry matter) and 2,000 pounds of water. After the drying operation we still have 8,000 pounds of corn (dry matter) and 1,412 pounds of water, total 9,412.

The final percentage is figured by dividing 9,412 into 1,411.8 (more accurately), which gives us 15 per cent.

Percentage of Loss in Drying Grain

Original Moisture Content Percentage at Head of Columns. Reduction after Drying in Column at Left

Per cent.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	24.	25.	26.	27.	28.	29.	30.	31.	32.	33.
P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.	P. ct.
1...	1.11	1.12	1.13	1.15	1.16	1.18	1.19	1.20	1.22	1.23	1.25	1.27	1.28	1.30	1.31	1.33	1.35	1.37	1.39	1.41	1.43	1.45	1.47
2...	2.20	2.22	2.25	2.27	2.30	2.33	2.35	2.38	2.41	2.44	2.47	2.50	2.53	2.56	2.60	2.63	2.67	2.70	2.74	2.78	2.82	2.86	2.90
3...	3.26	3.30	3.33	3.37	3.41	3.45	3.49	3.53	3.57	3.61	3.66	3.70	3.75	3.80	3.85	3.90	3.95	4.00	4.05	4.11	4.17	4.23	4.29
4...	4.30	4.35	4.39	4.44	4.49	4.54	4.60	4.65	4.70	4.76	4.82	4.88	4.94	5.00	5.06	5.13	5.19	5.26	5.33	5.40	5.48	5.55	5.63
5...	5.32	5.38	5.43	5.49	5.55	5.62	5.68	5.75	5.81	5.88	5.95	6.02	6.10	6.17	6.25	6.33	6.41	6.49	6.58	6.67	6.76	6.85	6.94
6...	6.31	6.38	6.45	6.52	6.59	6.67	6.74	6.82	6.90	6.98	7.06	7.14	7.23	7.32	7.41	7.50	7.60	7.69	7.79	7.89	8.00	8.11	8.22
7...	7.29	7.37	7.45	7.53	7.61	7.69	7.78	7.87	7.95	8.05	8.14	8.24	8.33	8.43	8.54	8.64	8.75	8.86	8.97	9.09	9.21	9.33	9.46
8...	8.25	8.34	8.42	8.51	8.60	8.70	8.79	8.89	8.99	9.09	9.20	9.30	9.41	9.52	9.64	9.76	9.88	10.00	10.13	10.26	10.39	10.53	10.67
9...	9.18	9.28	9.38	9.47	9.57	9.68	9.78	9.89	10.00	10.11	10.23	10.34	10.47	10.59	10.71	10.84	10.98	11.11	11.25	11.39	11.54	11.69	11.84
10...	10.10	10.20	10.31	10.42	10.53	10.64	10.75	10.87	10.99	11.11	11.24	11.36	11.49	11.63	11.76	11.90	12.05	12.20	12.35	12.50	12.66	12.82	12.99
11...	11.00	11.11	11.22	11.34	11.46	11.58	11.70	11.83	11.96	12.09	12.22	12.36	12.50	12.64	12.79	12.94	13.10	13.25	13.41	13.58	13.75	13.92	14.10
12...		12.00	12.12	12.25	12.37	12.50	12.63	12.77	12.90	13.04	13.19	13.33	13.48	13.64	13.79	13.95	14.12	14.29	14.46	14.63	14.82	15.00	15.19
13...			13.00	13.13	13.27	13.40	13.54	13.68	13.83	13.98	14.13	14.29	14.44	14.61	14.78	14.94	15.12	15.29	15.48	15.66	15.85	16.05	16.25
14...				14.00	14.14	14.29	14.43	14.58	14.74	14.89	15.05	15.22	15.38	15.56	15.73	15.91	16.09	16.28	16.47	16.67	16.87	17.07	17.28
15...					15.00	15.15	15.31	15.46	15.63	15.79	15.96	16.13	16.30	16.48	16.67	16.85	17.05	17.24	17.44	17.65	17.86	18.07	18.29
16...						16.00	16.16	16.33	16.50	16.67	16.84	17.02	17.20	17.39	17.58	17.78	17.98	18.18	18.39	18.60	18.82	19.05	19.28
17...							17.00	17.17	17.35	17.53	17.71	17.89	18.09	18.28	18.48	18.68	18.89	19.10	19.32	19.54	19.77	20.00	20.24
18...								18.00	18.18	18.37	18.56	18.75	18.95	19.15	19.35	19.57	19.78	20.00	20.22	20.46	20.69	20.93	21.18
19...									19.00	19.19	19.39	19.59	19.79	20.00	20.21	20.43	20.65	20.88	21.11	21.35	21.59	21.84	22.09
20...										20.00	20.20	20.41	20.62	20.83	21.05	21.28	21.51	21.74	21.98	22.22	22.47	22.73	22.99
21...											21.00	21.21	21.43	21.65	21.87	22.11	22.34	22.58	22.83	23.08	23.33	23.60	23.86
22...												22.00	22.22	22.45	22.68	22.92	23.16	23.40	23.66	23.91	24.18	24.44	24.72
23...													23.00	23.23	23.47	23.71	23.96	24.21	24.47	24.73	25.00	25.27	25.56
24...														24.00	24.24	24.49	24.74	25.00	25.26	25.53	25.81	26.09	26.37
25...															25.00	25.25	25.51	25.77	26.04	26.32	26.60	26.88	27.17

Grain and Feed Trade News

Reports of new firms, changes, deaths and failures; new elevators, feed mills, improvements, fires, casualties and accidents are solicited.

ARKANSAS

Little Rock, Ark.—The elevator of H. K. Cochran Grain Co. is wearing a bright new coat of aluminum paint.

Cave Springs, Ark.—The Cave Springs Mill, which has been idle for some time, is being repaired and will be opened by its former owner, W. T. Walls, who recently returned from Oregon.

CALIFORNIA

Elmira, Cal.—Jim Tucker, buyer for the California Hay & Grain Co., has opened a general feed store under the name of Solano Feed Store.

Los Angeles, Cal.—A \$25,000 grain storage building, of reinforced concrete and covering an area of approximately 60x42 ft., will be constructed for V-O Milling Co. Jones-Hettelsater Co. is the builder.

Santa Rosa, Cal.—Fred Gemetti has opened his new Gemetti's Feed Store in the modern fire-proof building recently erected for his use. Mr. Gemetti has had 18 years' experience in the feed and grain business in this community.

Tracy, Cal.—To celebrate the opening of the new alfalfa mill known as The Robinson Farms Alfalfa Mill & Feed Processing Plant, "open Mill Night" was held Oct. 9. The mill is located on the Robinson Farms, one of the largest single units of agriculture in this district, on the islands between Tracy and Stockton.

Visalia, Cal.—The Visalia Milling Co. has formally opened its new \$120,000 plant for business. Seven immense storage tanks holding 1,200 tons of grain which permit handling, cleaning and storing of grain direct from cars have been constructed. A new mixer and weighing devices also permit the mixing of poultry and dairy feeds with automatic precision and uniformity.

CANADA

Winkler, Man.—A. A. Kroker has installed a corn sheller supplied by The Duplex Mill & Mfg. Co.

Winnipeg, Man.—At the annual meeting of the Western Grain Standards Board held here early in October, recommendations for the exclusion of garnet wheat from No. 3 northern were heard. E. B. Ramsay, chairman and head of the Grain Commissioners of Canada, pointed out that the changes recommended in the grading of garnet wheat could only be effected by amendment of the Canada Grain Act, which cannot be made before the next session of parliament.

COLORADO

Fort Morgan, Col.—Fire reported as having been caused by an overheated stack slightly damaged the stock of the Fort Morgan Bean Co. on Oct. 8.

Sterling, Col.—The Colorado Grain & Bean Co. mill and elevator were destroyed by fire Oct. 6. The blaze may have started from a dust explosion. W. J. Robinson, manager of the company, estimated the loss at between \$40,000 and \$50,000. Union Pacific railroad workers reported hearing an explosion just before the fire started, and a sheet of flame burst from a cupola on the rear of the elevator. \$15,000 worth of grain burned, and both buildings were consumed within an hour and a half.

ILLINOIS

Colfax, Ill.—M. L. Miller has succeeded George Bierman as manager of the Williams Grain Co.

Stanford, Ill.—The first new corn of the season was taken in by the Stanford Grain Co., Oct. 11.

Albers, Ill.—William Netemeyer Elvtr. has installed a new 10-ton Soweigh Heavy Duty Motor Truck Scale.

Wing, Ill.—The Valley Grain Co. has recently installed a 10-h.p. electric motor to run its local elevator.

Ballard (Chenoa p. o.), Ill.—Boughton & Harlan have sold their elevator here to the newly organized Chenoa Grain Co.

Raymond, Ill.—The Farmers Grain Co. is replacing its old burr mill with a new No. 2 Jay Bee Humdinger Hammer Mill.

Pekin, Ill.—The grain elevator on the C. & A. tracks near the Adam Schaefer farm, southeast of South Pekin, has been torn down.

Long Creek (Decatur p. o.), Ill.—A new Soweigh Scale has been installed by Lloyd Veech adding much to the efficiency of his plant.

Woodford (Minonk p. o.), Ill.—The Woodford Elvtr. Co., J. A. Simpson Jr., owner, has just completed painting the south elevator.—G. H. R.

Cabery, Ill.—The Cabery Farmers Grain Co. has completed a new roof upon its warehouse office building and upon the west of its elevator.—G. H. R.

Zearing, Ill.—Arlington Grain Co. has installed a new Soweigh Scale at their new elevator here, and are equipped to give excellent service to all customers.

Assumption, Ill.—The Assumption Co-op. Grain Co. has construction of a new \$4,000 addition to its elevator, on the south side of the present building, well under way.

Shelbyville, Ill.—A 50-h.p. direct connected Kelly Duplex Model K Mill and No. 2 Vertical Feed Mixer have recently been installed by Shelby County Marketing Ass'n.

Wilmert (Lincoln p. o.), Ill.—The Wilmert elevator which has been shut down since the death of E. E. Gilchrist is again operating. Theo. O. Niewold is the new manager.

Harvel, Ill.—Fred L. Jostes, formerly manager of the B. & B. Farmers Co-op. Co. at Boody, Ill., has been appointed manager of the local elevator of Shellabarger Grain Products Co.

Monica, Ill.—Charles J. Gelling, aged 69, passed away Oct. 5. He was a former grain dealer, being engaged in the business locally for a number of years prior to his retirement in 1920.

Weldon, Ill.—A hot bearing set fire to the cupola of the Weldon Grain Co., on the evening of Oct. 11, but it was quickly extinguished. Journal alarms prevent such fires spreading beyond control.

Latham, Ill.—Henry F. Maus, 59, former Latham grain dealer, died in Decatur Oct. 9 following an illness of 14 months. Twenty years ago he operated a grain elevator here, but had resided in Decatur since 1922.

Galva, Ill.—The large scale at the west side of the Quaker Oats elevator has been completed. Gravel has been spread on the elevator driveway and a gravel walk has been made from the office to the street. Lester G. Allen is manager.

Ogden, Ill.—Grussing Grain Co. sold its elevator at Watkins crossing, 3½ miles east of here on state routes 10 and 49, to the Fithian Grain Co., owned by William Corray of Urbana. Mr. Corray will use this elevator as a storage place for small grain.

Bloomington, Ill.—The Hasenwinkle-Scholer Co. recently made improvements in its conveyor under track dumping sink to headhouse, putting in a belt conveyor to replace an old chain conveyor. Material was furnished by Eikenberry Construction Co.

Morrisonville, Ill.—The Morrisonville Elvtr. Co. recently incorporated, succeeds Shellabarger Grain Products Co. in operation of the local elevator. B. Earl Johns, formerly manager of the B. & B. Farmers Co-op. Co. at Blackland (Boody p. o.), is manager of the new company.

McLean, Ill.—The Funks Grove Grain Co. purchased two Hall distributors and new spouting from the Eikenberry Construction Co. for replacing the old style turnhead. Installation was made by Eikenberry Construction Co.

Weldon, Ill.—The Weldon Grain Co. has installed a Fairbanks-Morse hammer mill, and a 15-h.p. motor, reports Manager E. O. Martin. The company recently completed 35,000 bus. of additional storage space in four flat-bottomed bins adjacent to its 50,000 bu. elevator.

Langham (Verona p. o.), Ill.—The M. T. Welsh elevator has installed a Clow-Winter drive operated by a Westinghouse 5-h.p. single phase fully enclosed motor. Plant has been equipped with electric lights. A new Kewanee Truck-Lift has been installed on driveway.—G. H. R.

Springfield, Ill.—Ira F. Twist, president of the Twist Bros. Grain Co. and well known here, died Oct. 5 at Twist, Ark., following a two months' illness. He was 80 years old. The company of which he was a member operates seven grain elevators in Sangamon county. Interment was at Rochester, Ill.

Minonk, Ill.—George Bierman is new manager of the Terminal Grain Co. filling the vacancy created by the recent death of Joseph A. King. He has been assistant manager of the Williams Grain Co. at Colfax for the past two years. He and his mother will move here as soon as a location can be secured.

Farmington, Ill.—Ed Kessler of Cramer has purchased the elevator near the M. & St. L. right-of-way from Arthur Dalton and William A. Guthrie, taking immediate possession. Mr. Dalton and Mr. Guthrie purchased the elevator from the Jackson Lumber Co. two months ago. Mr. Kessler expects to start operating the elevator soon.

Fidelity, Ill.—The Fidelity Grain elevator was destroyed by fire of unknown origin early in the morning of Oct. 7. Destroyed in the 48 year old structure were 1,500 bus. of oats, 300 bus. of wheat and 50 bus. of corn. Machinery and equipment were also damaged. Loss to contents, \$1,800; to building, \$4,000; both covered by insurance.

Waukonsee (Verona p. o.), Ill.—The old landmark elevator built back in 1885, and owned by the Henry Gorham Estate, burned to the ground Oct. 15, 10:30 A. M. Fire originated from a spark from the exhaust pipe of the engine. 10,000 bus. of oats, stored in the elevator by M. T. Welsh of Langham, Ill., were destroyed. Grain, but not building was fully covered by insurance.—G. H. R.

Argenta, Ill.—Just completed by the A. & O. Grain Co. is an ear corn and oats or soybeans receiving and storage unit of frame, ironclad construction, with capacity for 20,000 bus. It consists of two cribs, covered over and protected with ventilating sheathing, a leg, a dump, a Kewanee Pneumatic Truck Lift, ear corn drags, a Fairbanks type Y 15 h.p. oil engine, and Western conveying machinery.

Cadwell, Ill.—Dan L. Hapenny resigned as manager of the Moultrie Grain Ass'n elevator, going to Tucson, Ariz., with Mrs. Hapenny on account of the latter's health. Eldon Hufford of Cerro Gordo was employed to succeed him. Mr. Hufford was graduated from I. C. of A. in 1936 and is well equipped to assume complete management. He will supervise the new improvements that are to be made at the elevator, also.

Peoria, Ill.—East Peoria Elvtr. Co. asked U. S. District Court Oct. 12 to dismiss a petition for a reorganization filed against it last month by four creditors. The company contends in the written motion to dismiss that three of the creditors, Robert K. Clark, Chas. W. LaPorte and Wm. O. Fritz, have security for their claims and therefore incompetent to join in the petition. The other petitioning creditor, Jefferson Trust and Savings bank, is stopped, it claims, by a judgment obtained several months ago.

Genoa, Ill.—Zeller & Son have sold their elevator to Frank Merriman, who for several years has been engaged in buying and selling grains, using the elevator and equipment for handling. Buying the elevator has put him in a position to cope with all competition. Zeller & Son retained the retailing feed and feed grinding business and will concentrate their efforts in the management and conducting of same in the future.

Kenney, Ill.—Kenneth Dierker, 9 year old son of Mr. and Mrs. John Dierker, narrowly escaped death in an accident at his father's elevator Oct. 9. He was helping his father when his clothing became entangled in a conveyor belt. The boy's body caused the belt to slip from the wheel and prevented him from being mangled. He suffered a broken right arm as his clothing was torn from his body.

Weldon, Ill.—More arrests have been made of individuals charged with fraudulent taking of 20,000 bus. of oats, and 6,800 bus. of corn, valued at \$13,000, from the Weldon Grain Co., and still others are sought. Edgar O. Martin, manager of the elevator, filed the complaints. Twelve persons have been arraigned and pleaded guilty Oct. 11. They were admitted to probation, to be returned Oct. 23 to make restitution. Two have already made partial restitution. Ray Gibson paid \$500 and Lendelle Prickett paid \$160. Dorothy Sparks paid court costs. The alleged racket of "short weighing" had been carried on systematically over a period of time, it is claimed. The persons bought grain from the elevator at night, driving on the scales for weighing with two wheels off side. How the practice was discovered was not divulged. Those arrested recently were Warren Woods, his mother, Mrs. Myrtle Woods, Holland Evans, Carl Myers, George Lettelle, of Franklin, Ill., Dorothy Sparks, Lendelle Prickett, Chas. Miner and Ronald Tanahill, of Jacksonville.

CHICAGO NOTES

Harold S. Singer, an employee of Faroll Bros., and Frederick L. Ryner, also of Chicago, have been admitted to membership in the Board of Trade.

The Columbia Malting Co. in South Chicago has dressed its elevator buildings in a new coat of aluminum paint.

William J. Freckelton, aged 83, died Oct. 19 at his home in Chicago. For 60 years he was engaged in the grain and feed business here.

Clarence A. Metzler, 76, died Oct. 20 in St. Luke's hospital after an illness of several months. He was an associate of his brother, Claude E. Metzler, in the grain storage business here.

W. A. Scoville has been appointed a member of the special committee of five authorized by the Board of Trade to examine conditions surrounding the Sept., 1937, corn squeeze. He replaces Edwin T. Maynard. The investigation is expected to occupy the attention of the committee for six months or more.

Pres. Kenneth S. Templeton of the Chicago Board of Trade announced the appointment of a com'te to investigate and make recommendations with respect to Board of Trade rules and regulations controlling the movement of grain into and out of federal and state-licensed public warehouses. Chairman of the com'te is James E. Skidmore; com'te members are Harvey S. Austrian, Frank A. Jost, Wm. M. Hommerding and John J. Coffman.

John C. Wood, G. Willard Hales and Peter B. Carey are a com'te of three appointed by the president of the Board of Trade to "learn if justified grounds exist for suspicion that orders of the Board of Trade's business conduct com'te had been violated," by participants in the September corn deal. William H. McDonald heads a com'te of five authorized to investigate cash and futures transactions in all grains, before, during and after September. Roland McHenry, E. T. Maynard, Edwin A. Boerner and E. A. Green are other members of this com'te.

A skull fracture resulting from a fall down a flight of stairs Oct. 14 caused the death Oct. 17 of Frank Sladek, 51, employed at the Northwestern Grain Elevator.

INDIANA

Westville, Ind.—Ed Moser has opened a feed mill here.

Clayton, Ind.—The Clayton Feed Store has installed a new feed mill.

New Harmony, Ind.—Work on the new Couch flour mill here is progressing nicely.—W. B. C.

Mill Creek, Ind.—The Mill Creek Elvtr. Co. has recently installed a Hess Direct Heat Drier.

Winchester, Ind.—Goodrich Construction Co. recently purchased a large Sidney Sheller and Conveyor.

Cynthiana, Ind.—Charles Nunn & Sons Milling Co. are installing a new Hall Signaling Grain Distributor.

Walton, Ind.—A. D. Shirley has equipped his elevator with a No. 30 Blue Streak Hammer Mill with magnetic separator.

Plymouth, Ind.—The Syler & Syler elevator has been improved with a new covering of iron cladding and a new man lift.—L.

West Lebanon, Ind.—Carl Routzahn has sold his feed store and mill equipment to James Jones who took possession Oct. 14.

Bloomfield, Ind.—John L. Morgan, aged 75, who was interested in grain elevators at Marco, Lyons, and Illene, Ind., is dead.—W. B. C.

Albion, Ind.—Safe robbers called on the Stiefel Grain Co. elevator on Sept. 19, hammered the lock and door from the safe and obtained \$165.—L.

Hartford City, Ind.—A No. 2 motor driven Kelly Duplex Vertical Feed Mixer, one ton capacity, has been installed by Hartford City Milling Co.

Edgerton, Ind.—The Edgerton Grain & Coal Co. is putting in a large Hess Direct Heat Drier. This is being installed in a new reinforced concrete building.

Boggs town, Ind.—The Boggs town Grain & Supply Co. has ordered a Hess Direct Heat Drier which will be installed in the immediate future at the company's elevator.

Grand View, Ind.—Cadick Milling Co. has completed installation of the large combined sheller and cleaner which they recently purchased of Sidney Grain Machinery Co.

Cicero, Ind.—We are building a cement block garage, 22x32 ft., for two trucks, and installing an extra pair of Howe Truck Scales to speed up delivery of coal.—Farmers Co-op. Company.

Windfall, Ind.—The Mitchell Partnership, Inc., has begun the erection of two concrete 12,500 bu. capacity soybean tanks. Machinery for processing soy beans will be installed shortly.—Leif.

Newburgh, Ind.—Louis Brizius, Sr., 75, for over 50 years head miller of the Brizius Milling Co., died recently after a long illness. He was the son of the late Charles Brizius, founder of the Brizius Milling Co.—W. B. C.

Ossian, Ind.—Franklin Robinson, formerly of Nappanee, has been appointed manager of the Levy Grain Co. elevator here. This elevator has been thoroughly modernized and is prepared to offer a complete service to the trade.—L.

Fulton, Ind.—We have just completed the installation of a new Hammer Mill and Ear Corn Crusher. Our grinding room has been remodeled and enlarged. A corn cracker and grader will be added later.—Mayer Grain Co.

Morocco, Ind.—Carl Williams has erected on his residence lot a 32x32 ft. building and will engage in the grinding and feed business. The building is of frame construction with metal sheeting, floors of concrete. Weigh scales have been installed and mixing machinery and electrical equipment are being installed. Mr. Williams' son, Delbert, is assisting him in operation of the mill.

Danville, Ind.—Hendricks County Farm Bureau Co-op Ass'n has a new Kelly Duplex Motor driven Vertical Feed Mixer, one ton capacity.

Winchester, Ind.—The Goodrich Bros. elevator line conducted its semi-annual meeting Oct. 8 in the Winchester elevator here. P. E. Goodrich, Claude Barnes and Glen Jones, federal grain inspector, addressed the managers present. Dinner was served the gathering at the Randolph hotel.

IOWA

Alburnett, Ia.—The Farmers Elvtr. Co. recently purchased a large Sidney Sheller.

Struble, Ia.—D. J. Elliott of Craig, Ia., has accepted the position of manager of the Farmers' Elvtr. Co. here.

George, Ia.—Locker Bros. Grain Co. have made improvements in their coal bins this fall.—Farmers Elvtr. Co.

Lake Mills, Ia.—Farmers Elvtr. Co., Alfred Larson, manager, has installed a Kelly Duplex Ear Corn Crusher & Feeder.

Stratford, Ia.—The Williams Grain Co. is installing a No. 33 Western Cleaner. George Todd Const. Co. is doing the work.

Morrison, Ia.—A cottage owned by the Farmers Co-op. Elvtr. Co. and occupied by the manager, Herman R. Stock, was destroyed by fire Oct. 7.

Carnes, (Alton p. o.), Ia.—The Farmers Mutual Co-op. Co. has improved its local elevator with installation of Howell Sectional Steel Dump Grates.

Sherman (Hubbard p. o.), Ia.—The local elevator is being covered with corrugated iron. Contract for the work was let to George Todd Construction Co.

Algona, Ia.—Charles Falk, of Humboldt, has taken over the management of the Critz Elevator succeeding Axel Peterson, who resigned because of ill health.

West View (Pocahontas p. o.), Ia.—West View Grain Co. has been incorporated. Capital stock, \$50,000. Pres., Claude M. Van Gundy; sec'y, Edna M. Van Gundy.

Dike, Ia.—At a meeting of the Farmers Co-op. Elvtr. Co. following the fire Oct. 8 that destroyed the company's elevator, plans were laid for immediate construction of a new elevator. The site is now being cleared for the new structure.

Alleman, Ia.—The Farmers Elvtr. Co. has installed a Western Sheller, a No. 33 Western Cleaner and a new leg belt and cups and now have one of the most modern shelling outfits in this part of the country. George Todd Construction Co. did the work.

Fort Dodge, Ia.—A. C. Heath, 70 years, died Oct. 9. He had been in ill health for several months. For many years Mr. Heath and a brother operated a large oatmeal mill here, later selling to the Quaker Oats Co.

Council Bluffs, Ia.—J. A. Williams, receiver of the Georgie Porgie Co., was authorized Oct. 15 by District Judge John P. Tinley to purchase necessary material for manufacturing and merchandising the products of the firm and to make the necessary contracts.

Atlantic, Ia.—E. J. McDermott, former Atlantic feed dealer, was found guilty by a Cass county district court jury on charges of uttering a forged instrument, and was sentenced to ten years in the state penitentiary by Judge Earl Peters at Clarinda, Oct. 20.

Sioux City, Ia.—An increase of 33 per cent in business during the last year has caused Omar Mills, Inc., to move its branch office here into other and larger quarters. L. F. Speedling, local manager, stated the increase was for the entire corporation, whose home office is in Omaha.

Alta, Ia.—The Farmers Elvtr. Co. is investigating the desirability of adding facilities to accommodate 75,000 bus. additional grain with a view to becoming a Federal bonded warehouse. It will be necessary to enlarge the present elevator to do this. John Stromberg is chairman of the investigating committee.

Clinton, Ia.—P. M. Nichols, Iowa City, pleaded not guilty and was ordered held to the grand jury under \$2,000 bonds after waiving a preliminary hearing in municipal court to a charge of larceny for alleged embezzlement of \$59.50 from the Champion Milling & Grain Co. The transaction in question took place last Feb. 17.

STRATTON GRAIN CO.

MILWAUKEE, WIS.

CHICAGO, ILL. SPRINGFIELD, O. ST. JOSEPH, MO. SCHNEIDER, IND. NEW YORK, N. Y.

MILL FEEDS — FEED PRODUCTS — BY-PRODUCTS

Consignments and Future Orders Solicited

Council Bluffs, Ia.—A group of grain elevator superintendents in Council Bluffs and Omaha met Oct. 20 at Hotel Chieftain for the purpose of organizing a chapter of the national organization of elevator superintendents. Charles R. Walker, superintendent of the Farmers Terminal Elevator, Co. and national pres. of the Grain Elevator Superintendents of America, presided.

Des Moines, Ia.—The National Feed & Supply Co. has its new plant and warehouse practically completed. It is a one-story L-shaped brick structure composed of two wings, each 50 by 100 ft. It has a storage capacity of approximately 70 carloads of feed, in addition to facilities for mixing poultry feeds. Trackage on Maury st. enables the company to unload 3 cars simultaneously, while a dock at the rear permits loading 5 trucks at a time. J. A. Goranson is manager.

Exira, Ia.—Herman Bornholdt, 60, grain and seed dealer here for years, died Oct. 18. He had been in ailing health from heart trouble for several years, his condition having been critical for the past two months. Mr. Bornholdt came to Exira in 1906 from Shelby where he had worked for several years in a grain elevator for the Rothchild company. A few years after being transferred here he bought the local grain business and was actively engaged in the management of the elevator and seed business for a number of years.

Sioux City, Ia.—At the annual meeting of the Sioux City Grain exchange Oct. 16 the board of directors was increased from 7 to 9. Men elected to the new positions are Paul A. Ketels and C. E. McDonald. Three members of the board were re-elected. They are John Wacek, J. S. Eales and J. C. Mullaney. The holdover members are S. B. Mason, C. C. Flanley, S. A. McMasters and A. B. Doherty. Officers of the exchange are Mr. Mullaney, pres.; Mr. McDonald, vice pres.; Mr. Eales, treas.; Freeman Bradford, sec'y, and Paul Larson, chief inspector and weighmaster.

Gruver, Ia.—Just a week after having been stolen, all fifteen checks taken from the elevator owned by Paul Graves here, have been taken in at the Emmet County bank, made out in amounts of from \$15 to \$25 and totalling \$300. These checks were cashed in Lake Mills, Mason City and Fort Dodge. All had been filled in with a typewriter and run thru a check perforator. The typewriter and check protector are believed to have belonged to the Elmore (Minn.) elevator as this elevator was broken into about the same time and the typewriter and check perforator used. All those who cashed the checks say there were two men, a tall one with dark, bushy hair, another, older, short and of sandy complexion.

Sioux City, Ia.—The Farmers Co-op. Society awarded the contract for its new 25,000 bu. elevator to Younglove Construction Co. It will be of cribbed construction, containing 12 bins and full basement on concrete slab. The new plant will be equipped with a 2,000 bu. automatic scale, air lift and head drive, 2,500 bu. per hour elevator leg, D. P. cups, manlift and totally enclosed motor. Building to be iron-clad thruout. The present elevator is to be covered with galvanized iron and rebuilt into a feed grinding plant. The main feature of this entire plant is a double driveway so all feed grinding and feeds will be handled thru one driveway and the second driveway is for handling of grain, which allows a continuous service to the public without waiting.

Lake Park, Ia.—C. V. Ward of Kingsley was sentenced Oct. 11 to a term not exceeding seven years in Fort Madison penitentiary for obtaining grain from the Farmers Exchange Elevator Co. here under false pretenses. Ward was convicted by a jury Friday night, Oct. 8. The amount involved was \$150 for grain purchased Nov. 27, 1936, when he wrote out a check to pay for same, but failed to leave it, later claiming to have paid by cash. Ward was also ordered to pay the costs of the case, computed to be \$382.37. The judge, in pronouncing sentence, stated the severity of same was due, not only to the jury verdict, but to the fact that he had proven himself guilty of a more serious offence, that of perjury, as his testimony in the April (he had been previously tried on the same charge but the jury could not reach an agreement and were dismissed) and October trials was different and one or the other must be wrong. Since the trial it is stated Ward admits he did sign a check and after getting away with it in his possession, felt he could beat it out.

Luverne, Ia.—Using a powerful charge of nitroglycerine, thieves blew the safe in the office of the Sanford & Lindebak elevator all over the place recently. Had the burglars investigated first, they would have found the safe unlocked and empty. As it is, the blast not only demolished the safe, but wrecked the office as well, all windows being blown out and the door torn off.

Spencer, Ia.—A grain trade banquet and meeting, the first of its kind to be held in northwest Iowa, was held at Hotel Tangney the evening of Oct. 22. One hundred and ninety-nine northwest towns were invited to participate in the gathering. Con. V. F. Harrington of Sioux City was the principal speaker at the banquet. The meeting was called by S. W. Eastlack of Schaller and Hugh Hale of Royal, directors of the Western Grain & Feed Dealers Ass'n of Des Moines, Ia.

KANSAS

Pittsburgh, Kans.—A small fire occurred at the Cash Grain & Feed Co. warehouse Oct. 9. Damage resulting was small.

Spivey, Kan.—J. H. Baldauf has been appointed manager of the Gano Grain Co. succeeding Ed Sult, who moved to Idaho.

Wichita, Kan.—Julius Augustus Weidenbach, 80, retired grain buyer for the Larabee Mills, died Oct. 1 after a three months' illness.

Atchison, Kan.—The 1000-bbl. plant of the Lukens Milling Co., which burned Aug. 28, will be rebuilt if the insurance is adjusted satisfactorily.

Emporia, Kan.—J. D. Collins has closed his elevator at Plymouth. While the elevator may be opened later, Mr. Collins had "nothing definite to say now."

Enterprise, Kan.—In accordance with a recent agreement of the Kansas Flour Mills Corp. with farmers living west of Enterprise, the mill dam is being lowered.

Waterville, Kan.—By a recently consummated deal B. T. Oakley and P. R. Thomas acquired complete ownership of the Blue Valley Grain Co. Mr. Oakley will continue in full charge of the elevator business.

Iola, Kan.—The Iola Milling Co. has announced its expansion into the feed milling business. Machinery for a complete feed mixing plant has been installed, capable of compounding a full line of commercial feeds. In addition, corn meal, whole wheat flour, graham flour and a dog food will be produced. D. A. McDonald is president of the company.

Centralia, Kan.—The Geiger Grain Co. elevator was totally destroyed by fire early the morning of Oct. 2. Altho the building did not contain a large amount of grain, it is believed the fire was caused from a grain explosion. Lee Cockeran was manager of the elevator, Charles A. Geiger, owner. Stock of the Farmers Union Jobbing Ass'n was damaged by the fire.

Grainfield, Kan.—F. B. Cox is celebrating his sixteenth anniversary as manager of the Robinson Milling Co. elevator this month. During those years he has seen the old wooden elevator, now 50 years old and still in service, augmented by the erection of another new one with a capacity of 30,000 bus., a 22x40 ft. warehouse and new office building, and the installation of modern machinery to replace antiquated methods of grain handling.

Argonia, Kan.—The new elevator for J. S. Hamilton, which has been under construction for some time, has been completed and is open for business. The Hamilton Grain Co. is buying for the Wallingford Grain Co. of Wichita. The new elevator has a capacity of 12,000 bus. and a loading capacity of 2,700 bus. an hour. Its equipment is all modern, the dump with an overhead hoist. For the present the weighing will continue to be done at the Hamilton Newby farm equipment office.

Arkansas City, Kan.—We are completing installation of a Fairbanks Plate Fulcrum Motor Truck Scale, the first of its kind to be installed in this part of the country. Capacity 40 tons with a 50 ton maximum attainable with some adjustments of levers, it is the largest and most modern that has ever been installed in any milling plant. The platform measures 43x10 ft. with concrete floor. It will be used for custom weighing in addition to grain weighing. The new scale will assure the most accurate weighing possible.—The New Era Milling Co.

Dodge City, Kan.—The Tax Commissions' recent ruling on coal and fuels sold to educational and religious institutions not operating for profit is as follows: "The sale of coal and other fuels to educational institutions not operated for profit, or to religious and charitable institutions are exempt from the tax. Such exemptions shall not apply to the sale of coal and other fuels for use in parsonages, parish houses or other residences of the clergy. The above rule shall be effective as of the date of Oct. 1, 1937."—J. F. Moyer, sec'y, Kansas Grain, Feed & Seed Dealers' Ass'n.

KENTUCKY

Bloomfield, Ky.—D. B. Southerland & Co. have recently installed a Corn Cutter and Grader furnished by Duplex Mill & Mfg. Co.

Flemingsburg, Ky.—The Flemingsburg Hatchery has started grinding its own feeds at its local plant, and will thus give the farming community added service. Alban Dorsey, Jr., is manager.

Bardstown, Ky.—A building boom that has enlivened business here featured the construction for four grain elevators recently, two of which were for the Bardstown Milling Co. as reported this summer by the Journals.

MARYLAND

Crisfield, Md.—I. J. Betts has installed a No. 56½-D Kelly Duplex Corn Cutter & Grader.

MICHIGAN

Fremont, Mich.—Wolters Milling Co. sustained damages in a windstorm Sept. 23.

Midland, Mich.—The Michigan Bean Co. is erecting coal sheds and bins to cost \$6,000.

Pinconning, Mich.—Farm Bureau Supply Store recently installed a ton Kwik-Mix mixer.

Eaton Rapids, Mich.—Farmers Warehouse Co. has a new No. 6 Kelly Duplex Ear Corn Crusher & Feeder.

Hastings, Mich.—The Hastings Grain and Bean Co. has bought from Walter Wallace his interest in the stock and poultry feed business here.

Carleton, Mich.—Kahlbaun Bros. recently purchased a large Eureka Cleaner from Sidney Grain Machinery Co. and have just completed its installation.

Coopersville, Mich.—Coopersville Co-op Elevator has recently installed a new Kelly Duplex Motor driven No. 2 Vertical Feed Mixer, one ton capacity.

Lowell, Mich.—William J. Traynick has been engaged as assistant to William C. Doyle of the King Milling Co. He has been connected with the Valley City Milling Co. at Portland for the past 12 years. Mr. Traynick will move his family here in the near future.

Battle Creek, Mich.—Eugene H. McKay, whose retirement from the Kellogg Co., and purchase of a building for an experimental laboratory was reported in the last issue of the Journals, will operate a business of his own, it is announced, under the name of McKay Food Products Co.

Romeo, Mich.—Clifton Mills, one of the oldest water-power mills in this area and a landmark in northern Macomb County, has been purchased by B. C. Price, Detroit, and will be put into full operation by Nov. 1. A new spillway is being erected to replace the old dam; new shingles and siding will be placed on the mill proper; the interior of the mill will be rebuilt. In the spring a house will be erected east of the mill. New fencing has been placed around the 8 acre tract and a brick wall will be erected across the front of the property. F. B. Kost will be manager.

Secular-Bishop Grain Co.

GRAIN MERCHANTS

KANSAS CITY SUPERIOR OMAHA

Au Gres, Mich.—The Consolidated Grain Corp. has completed its new plant at Au Gres, built to replace the one that burned Aug. 8. The new elevator is equipped with two 99 D cleaners, feed grinder, mixer and has a bin capacity of 15,000 bus.—Consolidated Grain Corp., Irene Drouillard, sec'y.

Lansing, Mich.—Lansing's oldest building, the old flour mill at the north side dam, a structure which housed the city's first manufacturing industry, is being taken down. The National Grain Corp. were former owners of the mill. They had a plan to erect elevators along the manufacturer beltline and to make Lansing a storage center for grain dealers. The land occupied by the ancient mill and also adjacent property, owned by the corporation, was sold to the city of Lansing. The cement grain storage was sold to the Christian Breisch Corp., taken down, and reassembled at the Breisch company's north side elevator. Some of the equipment in the old mill has been in use 60 years.

MINNESOTA

Kerkhoven, Minn.—Hoover Grain Co. sustained damages in a windstorm.

Ghent, Minn.—John N. Hughes, Jr., 25, local grain buyer died Oct. 8 in Minneapolis.

Wabasso, Minn.—Frank W. Brey recently improved his elevator service with the installation of two sets of Howell Sectional Steel Dump Grates.

Winsted, Minn.—Leonard Westrup has purchased the Winsted Feed Mill from Albert Merchant. The deal included the warehouse and portable grinder.

Benson, Minn.—The Farmers Exchange has added a new Kelly Duplex one ton capacity Vertical Feed Mixer to its equipment. The mixer is motor driven.

Howard Lake, Minn.—A new building for its feed mill will be built by Custer Produce Co. at Howard Lake. Part of the building will be used for grain and feed storage.

Duluth, Minn.—The Moorhead Farmers Elvtr. Co. has been admitted to corporation membership in the Duluth Board of Trade; also the Case Grain Co. of Minneapolis.

St. Vincent, Minn.—New Calumet High Speed Buckets recently installed at St. Vincent Elvtr. Co. elevator have added considerably to the efficient working equipment of the plant.

Blue Earth, Minn.—Spontaneous ignition in oil treated coal is reported to have been the cause of a fire which slightly damaged the coal shed of the Pfeffer Elvtr. Co. on Sept. 3.

Duluth, Minn.—Permanent margins of 5c per bu. on wheat and 10c per bu. on flax on all open trades became effective Oct. 14, 1937, by the Duluth Board of Trade Clearing Ass'n.—F. G. C.

Belle Plaine, Minn.—Hoelz Milling Co. has modernized its plant with installation of a new Model M 16" Kelly Duplex Hammer Mill, No. 6 Ear Corn Crusher & Feeder and Magnetic Separator.

Bruce (Hills, p. o.), Minn.—E. A. Brown & Co. is repairing and putting in a new scale and dump at the elevator here which the company recently bought. Herman Skovgaard will be the new manager.

Duluth, Minn.—Members of the Duluth Board of Trade voted Oct. 18 overwhelmingly in favor of an addition to the rules, prohibiting trading in contracts for future delivery, last three days of any current month.—F. G. C.

Meriden, Minn.—Henry Olson, who has been here for several weeks repairing and remodeling the elevator, will be manager of the Meriden Grain Co. The elevator will be open for business in the near future.

Maple Lake, Minn.—Fire, caused by the igniting of a belt which was running over a pulley in the upper part of the Atlantic Elvtr. building Oct. 7 caused a small loss. Prompt action on the part of the town's volunteer fire department extinguished the flames before great damage resulted.

Winnebago, Minn.—The contract for the new elevator and warehouse for Winnebago Farmers Elvtr. Co. in this city has been let to V. M. Zweber Co., and work on the construction is beginning immediately. This firm built the Delavan elevator last year. The new structure is to be completed and in use by Dec. 1. New machinery will also be installed.

Bellingham, Minn.—The Farmers Co-op Elvtr. Co. of Bellingham has been incorporated. Capital stock is \$25,000. Incorporators are William J. Koeckeritz, John Boehnke, Conrad Hackert, John H. Karels, all of Bellingham, and John Spors, Big Stone City, S. D. Officers are pres., Mr. Spors; vice-pres., Mr. Karels; sec'y, Mr. Koeckeritz; treas., Mr. Boehnke.

Cannon Falls, Minn.—The Cannon Falls Farmers Elvtr. Co. has installed a new Fairbanks, Type S Grain Dump Scale with a 20 ton capacity. This scale measures 28 ft. long and is big enough to handle any truck or trailer load. It is equipped with a Type Registering beam. The company also installed a 50-ft. steel ladder, from cupola to ground, for use of anyone trapped in the cupola in event of a fire.

MINNEAPOLIS LETTER

Frank G. Brooberg, 78, Minneapolis grain broker, died recently. He was a member of the Keystone Grain Co.

Van Dusen-Harrington Co. is building an addition to the frame office of the company's grain elevator. The improvement is to be completed by Nov. 1.

John G. McHugh, for 30 years sec'y of the Chamber of Commerce, and a nationally known figure in grain marketing, has resigned because of continued ill health. He was elected sec'y in 1907, succeeding L. T. Jammie. Mr. McHugh also had been treasurer of the Chamber of Commerce for 11 years. He is planning an extensive travel and rest cure. Edward S. Hughes, for 32 years ass't sec'y, was appointed acting sec'y. Other officers recently elected are pres., F. Carleton Smith, vice-pres. and sec'y of the Minnesota Linseed Oil Co., succeeding E. E. Mitchell; first vice-pres., Walter H. Mills; second vice-pres., J. A. Mull.

MISSOURI

Ash Grove, Mo.—Likins Bros. sustained damage to their electrical equipment Sept. 28.

Aurora, Mo.—On Sept. 29 the Majestic Flour Mill sustained damage to electrical equipment.

Lock Springs, Mo.—New shellers are being installed in the H. H. Green Mill & Elvtr. Co. plant.

Hamilton, Mo.—We are installing new shellers in our local plant.—H. H. Green Mill & Elvtr. Co.

Kidder, Mo.—The H. H. Green Mill & Elvtr. Co. is giving the elevator a new coat of aluminum paint.

Slater, Mo.—The Slater Mill & Elvtr. Co. sustained slight damage to plant electrical equipment recently.

Columbia, Mo.—The Barkwell Feed & Coal Co. recently installed a Kelly Duplex motor driven Vertical Feed Mixer.

Columbia, Mo.—The Columbia Co-op Warehouse Co. has a new Model L Kelly Duplex Hammer Mill and 40-h.p. motor.

Sikeston, Mo.—George Turley suffered a severely injured knee cap recently at the Matthews elevator when he fell off the incline at the South end and landed in a pit five feet below. Turley said he could not see his footing in the darkness. He was hauling corn to the elevator.

Kansas City, Mo.—Staley Milling Co.'s strike, which kept the company from operating for more than 3 months, is ended. Still pending is a suit instituted by J. H. Staley, pres. of the firm, against strikers seeking \$125,000 in damages, including damage to property, effect on business and punitive penalties.

Villa Ridge, Mo.—Stock of the Consolidated Flour Mills Co. was damaged by fire of undetermined cause on Oct. 3. The grain and flour elevator building was destroyed. Pat C. Byrne is manager of the elevator.

Charleston, Mo.—A new frame and sheet steel warehouse, 40x80 ft. is practically completed at the R. C. Davis Cotton & Grain Co. plant in the east limits of Charleston. A loading dock under roof is provided the entire length of the building. It will be used to provide storage for corn, peas, beans, hay and grain crops generally.

Jefferson City, Mo.—A hearing on "general farm legislation" is announced for Jefferson City on Nov. 1 by the com'te on agriculture and forestry of the United States senate. Jewell Mayes, commissioner of agriculture, is arranging for the Missouri hearing at the request of Sen. Ellison D. Smith of South Carolina, chairman of the senate com'te. The com'te will meet at 10 a. m. Nov. 1 with a second session at 2 p. m.

Higginsville, Mo.—The Missouri Grain Dealers & Millers Ass'n reports the following new members enrolled: Galloway Grain Co., Elsberry; W. L. Gilmore, Clarksville; Wilder & Taylor, Laddonia; Harper Elvtr. & Supply Co., Sturgeon; F. M. Stamper Co., Moberly; Clarence Roller Mills, Clarence; Sproul & Son, Paris; Roy Hartwig, Bourbon; E. C. Biles, Belle; J. H. Tuepker Produce Co., California; M. F. A. Co-op. Ass'n, Tipton; E. M. Pettigrew, Lathan; Evans Produce Co., Eldon; Anchor Produce Co., Tusculumbia; Daniel Hord, Jr. Estate, Berger, Mo.

St. Louis, Mo.—The Ralston Purina Co. will open bids on Oct. 26 for construction of a seven-story and basement, concrete and brick building to replace the one-story warehouse attached to the south end of its 8th street feed plant. The new fire-proof building will be air-conditioned thruout. Two full floors will be devoted to a complete laboratory, two more to additional office space, others to the cafe, banquet and meeting halls for company employees and the 100,000 dealers and guests who visit the plant annually. The first floor will be continued as a warehouse, with long loading dock to serve trucks. The company's soybean department, which has attained a prominent position in the last few years, it is expected will be located in a section of the new office space.

MONTANA

Hardin, Mont.—Norman M. Markuson of Billings took over the management of the Occident elevator here Oct. 1, succeeding Edwin Nyhies, who has served since the former manager, Lester Orr, was transferred to Billings two months ago.

Hysham, Mont.—H. E. Olson, local agent for the International Elvtr. Co. states the elevator will be kept open for the purpose of handling feeds, and not close up in the winter as has been the practice during the past few years. It will have on hand bran and mixed feeds, and will continue to transact all other customary elevator business.

NEBRASKA

Scribner, Neb.—Walter Mass, manager of the Scribner Grain & Lumber Co., and Miss Delma Meyer were married Oct. 2.

Oakland, Neb.—The Holmquist Grain & Lumber Co. celebrated the 55th anniversary of the founding of the company with the dedication of its new, large enclosed lumber storage building here Oct. 9.

Schuyler, Neb.—Gerald Ehernberger, proprietor of the Golden West elevator, has added a feed mill to his elevator equipment and is now doing custom grinding. The equipment consists of a Jay-Bee Grinder, driven by a 40-h.p. motor. The equipment has a capacity of 100 to 200 bus. an hour. The Mill has two grist bins for unground grain and two bins for ground feed.

ELLIS DRIERS

Known the world over for reliability and perfection of product. Direct Heat — Indirect Heat — And Steam Heat. Also . . .

A complete line of Rotary Driers and Feeders for mill and feed plants.

The Ellis Drier Co.

2444-56 N. Crawford Ave. Chicago, Ill., U. S. A.

Official Brown-Duvel MOISTURE TESTERS

Tag Heppenstall Moisture Meters
and a complete line of grain and seed testing equipment. Every item guaranteed up to government specifications.

HARRY B. OLSON ASHLAND BLOCK
CHICAGO, ILL.

Madrid, Neb.—Virgil A. Kelley of Matheson, Col., has purchased an interest in the Conley-Ross Elvtr. and has taken up residence here with his family. I. S. Crawford, who has been the local manager for the company, will give full time to his farm north of town.

Holdrege, Neb.—New feed mixing equipment has been installed recently in the Burgeson Feed and Produce Store. Employees of the store and its Bertrand, Oxford and Stamford branches, met recently, to see the machinery demonstrated and make plans for distribution.

Lexington, Neb.—A building 22x47 ft. has been constructed over the new Diesel engine, which arrived recently and was set up on a foundation north of the Lexington Mill & Elvtr. Co.'s mill, near Lincoln highway. The big power unit is expected to supply power and heat for the company. A supply tank which will hold 15,000 gals. of fuel oil has been installed west of the power house.

Omaha, Neb.—The Nebraska Grain Dealers Ass'n will hold its ninth annual convention at the Fontenelle hotel Oct. 28. George A. Stites is pres. and J. N. Campbell, sec'y-treas. New members recently added to the ass'n are Moseman Lumber Co., Pender, Neb.; Farmers Grain & Livestock Ass'n, Coleridge, Neb.; Swanson & Anderson, Oakland, Neb.; Cortland Grain Co., Cortland, Neb.; Farmers Union Co-op. Ass'n, Eagle, Neb., and Simon Rehmeier, Alvo, Neb.

NEW JERSEY

Atlantic City, N. J.—The Atlantic City Hay, Feed & Manure Co. has been incorporated for \$10,000.

Hackettstown, N. J.—The plant of the Beatty Flour & Feed Mills, which burned recently, is being rebuilt.

NEW YORK

East Otto, N. Y.—Ray Woodruff of Buffalo has purchased the Mill Valley Mills.

Buffalo, N. Y.—Thirty-six new grain storage tanks will be erected at the Washburn Crosby mill.

Saratoga, N. Y.—Edward Barber Ashton, pres. and treas. of the Saratoga Milling & Grain Co., died recently of a heart attack. He was 66 years old.

Buffalo, N. Y.—Hayden Newhall, well known member of the Buffalo grain trade, died Oct. 15. Mr. Newhall was 59 years old and had been in the grain brokerage business for many years.

Buffalo, N. Y.—The Superior Grain Co. has been formed to engage in the general cash grain business. The pres. is Charles M. Kennedy of the Charles M. Kennedy Grain Co.; vice-pres., Thos. C. O'Brien, Superior Forwarding Co.; treas., Edgar B. Black, Kennedy Grain Co., and sec'y, Arthur W. Murray. The coarse grain department will be managed by Frank F. Smith, formerly of the American Elvtr. Corp. at Buffalo. Offices will be in the Marine Trust Bldg.

NORTH DAKOTA

Walhalla, N. D.—A new grain cleaner was installed in the Farmers Union elevator here.

Prosper, N. D.—Equity Elvtr. & Trading Co. reports damages received in a windstorm Sept. 23.

Portland, N. D.—The Portland Junction Grain Co. has equipped its driveway with a new Clow-Winter pneumatic truck lift.

Maxbass, N. D.—The International Elvtr. Co. recently equipped its leg with a new Clow-Winter direct connected Geared Head Drive and 5-h.p. Fairbanks motor.

Fargo, N. D.—Stockholders of the Northwest Grain Ass'n met Oct. 18 at the Gardner hotel. A. M. Thompson, Cogswell, N. D., pres., reported good progress has been made during the last year in perfecting the marketing machinery of the ass'n.

Burnstad, N. D.—Two elevators of the Logan Grain Co. and 4,000 bus. of grain along with the railroad depot and other property in Burnstad were destroyed by fire early Oct. 15. William Cummings, of Fargo, and H. W. Reed, of Burnstad, major stockholders in the grain company, estimated the company's loss at \$25,000.

Casselton, N. D.—Contract for the construction of the Casselton Elvtr. Co.'s new elevator and feed manufacturing plant, to be built at the junction of highways 10 and 18, about 1 mile south of here, has been let and work started at once. The elevator will have a capacity of 30,000 bus.; the manufacturing plant will contain complete feed grinding and mixing unit; warehouses and coal sheds will be constructed. George M. Breshnahan is pres. and general manager. The contract was awarded to T. E. Ibberson Co.

Salem, N. D.—Guy G. McCullough, manager of the McCook Co. Elvtr. Co. for the past two years, purchased the plant recently. He will continue to conduct the business as he has in the past, operating the feed mill at the elevator, and if conditions warrant it in the future, grain buying operations will be resumed. The McCook Co. Elvtr. Co. has been in existence for many years, the original stockholders having been William Barnhart, J. C. Bartscher, Henry Fendrich and the late William and George McCullough. At various times it has been under the management of A. E. Roop, H. W. Schneider and McKinley Barnhart before Mr. McCullough assumed control.

OHIO

Lewisburg, O.—Floyd Milling Co. recently installed a No. 15 Kelly Duplex Cutter Head and a corn sheller.

Kingsway (R. D. Fremont), O.—The People's Elvtr. & Supply Co. plant was damaged in a recent windstorm.

Sunbury, O.—Sunshine Feed Stores, recently purchased a seed cleaner for the local store from Sidney Grain Machinery Co.

Williamstown, O.—Kliesch Bros. are now using a fanning mill with sacking elevator furnished by Duplex Mill & Mfg. Co.

Columbus, O.—John W. Orr, aged 58, for 18 years elevator foreman at the Gwinn Milling Co., died of a heart attack while at the mill.

New Holland, O.—The C. E. Groce Estate recently installed a new corn sheller, product of the Sidney Grain Machinery Co., at the local elevator.

Osborn, O.—The Osborn Co-op Grain Ass'n ships over the Erie and the Big Four railroads and transports grain to market in its own trucks.

Springfield, O.—Stratton Grain Co. recently installed a large revolving corn cleaner and heavy duty conveyor, purchased from Sidney Grain Machinery Co.

Johnsville (R. D. New Lebanon), O.—J. C. Grogg has leased the Johnsville Mill to R. J. Harvey, owner of the Edison Mill. A new one-ton feed mixer has been added to the equipment.

Clyde, O.—W. H. Moody, formerly of the Moody & Thomas Milling Co., Shelby, O., and recently with the Hanley Milling Co., Mansfield, has purchased and will operate the Robinson & Ziegler mill at this place.

Bascom, O.—The Bascom Elvtr. & Supply Co. has purchased the Sneath-Cunningham Co. elevator here. The Bascom company will operate both elevators. Francis Brickner, who has been manager for the Bascom Elvtr. & Supply Co., will be in charge of both elevators.

Springfield, O.—The Union National Mill has sold its old plant to the Stratton Grain Co. and is now operating its new mill and elevator, with no change whatever in its business. The new plant is located on the Big Four railroad, at the corner of Power and Warder sts.

Marysville, O.—Our excellent report of the meeting held here Sept. 25 under the auspices of the Ohio Grain & Feed Dealers Ass'n omitted notice of G. E. O'Brien, Greenville, who is president, and W. W. Cummings, Columbus, sec'y of the state ass'n. Mr. O'Brien presided. More group meetings are planned by the state ass'n.

Columbus, O.—Grain and feed dealers who have been added to our membership during the past month are Citizens Elvtr. Co., Versailles, O.; O. L. Ross, R. F. D., Greenville, O.; C. E. Conover, Greenville, O.; W. H. Brown, R. F. D., New Madison, O.; Waldo Elvtr., Waldo, O.; L. J. Schuster, Toledo, O.; L. J. Fitzgerald, Cincinnati, O.; Xenia Farmers Exch., Xenia, O.; Gilliland Grain & Coal Co., Van Wert, O.; Harry B. Olson, Chicago, Ill.—W. W. Cummings, sec'y, Ohio Grain, Mill & Feed Dealers Ass'n.

EXCERPTS from a recent
ROGER BABSON Special
Letter: "The world has always had political revolutions . . . our democracy as now set up is bound to fail . . . a Christian democracy is the ultimate form of government . . . it may be necessary to take the vote away from all of us for a generation and then start over again . . . some sort of Facism inevitable in United States . . . all governments sooner or later become top-heavy with bureaucracy, A DISEASE WHICH CAN BE CURED ONLY BY A COMPLETE WIPING OUT." Think it over.

LOWELL HOIT & CO.

Toledo, O.—Fred Mayer, who now denies that he is starting on his second hundred years of service in the marketing of grain, is receiving congratulations from other pioneers who started in the business when ox carts and canal boats were in common use for transporting grain. Fred is peeved because he says, "I am only 69."

Marion, O.—A decision to appoint a federal grain and soybean inspector for Marion and vicinity was reached recently, at a conference between the U. S. Dept. of Agriculture, local milling officials and W. D. Brown, sec'y of the Chamber of Commerce. The service will be optional to elevators and milling companies. Only carload shipments of wheat and other grains will be tested, the small amounts brought in by farmers from time to time not being examined by the federal inspector it was announced.

OKLAHOMA

Grandfield, Okla.—We have installed a new Papec Hammer Mill greatly increasing our grinding capacity.—Farmers Co-op. Elvtr. Co.

Chickasha, Okla.—Work of remodeling and enlarging the feed and seed room at the Chickasha Milling Co. elevator has been completed. The new metal covered building is 20x42 ft. New driveways have been graded and electric wiring installed. In every respect it has been made more convenient for large trucks and room for handling products has been appreciably increased according to John Dick, manager.

PACIFIC NORTHWEST

Ewan, Wash.—William Crystal Curtis, 61, well-known grain dealer, died suddenly of a heart attack Oct. 11.

Hillyard, Wash.—Lawrence Hall has sold his portable feed mill to Frank Skates of Morgan Acres. Hall has operated the mill since 1932.

Snoqualmie, Wash.—C. Frank Anderson has opened a new feed store in the warehouse formerly owned by Elmer and Roy Anderson.

Pleasant View (Eureka p. o.), Wash.—The buildings and equipment of the Walla Walla Grain Growers, Inc., were severely damaged by fire of unknown origin Oct. 14.

Corvallis, Ore.—E. E. Eastwood, who recently took over the Merchants Milling Co. here has changed the name to the Valley Milling Co.

Latah, Wash.—The Wood Warehouse Co. is building temporary warehouses to shelter 20,000 sacks of grain which could not be accommodated with existing warehouses and elevators in this area.

Yakima, Wash.—Suit against R. I. Morgan, doing business as West Side Feed and Seed Co., for \$2299.96 alleged due on loans and \$384.95 alleged due on rent was filed in Yakima county superior court Friday by Cleo M. Huff.

Seattle, Wash.—Pacific Northwest millers held a two day convention Oct. 1 and 2 in the New Washington hotel of this city. Seattle, Portland and Spokane were all represented at the session when milling problems were discussed.

Salem, Ore.—The General Feed & Grain Co. has been organized to do general grain and feed business. The company has taken over the old location of the Farmers Grain Co. and operations were started Oct. 1 with A. H. Buck, formerly of Eugene, Ore., in charge.

Eagle Point, Ore.—Putnam Bros., who recently bought the Snowy Butte Mills have dismantled the flour mill machinery and are installing feed grinding and mixing equipment. A new concrete dam has been built to replace the one built in 1867, and which was washed out.

Longview, Wash.—The Continental Grain Co. has leased the Longview Grain Elevator, with a capacity of 300,000 bus. This is the second elevator taken under lease by Continental this season, the Northwestern Dock having been taken early in the summer. S. A. MacLean will continue as local manager of the Longview elevator.

Newport, Wash.—The firm of M. Fox & Sons, who recently leased the Milwaukee freight depot building for office and warehouse purposes, are moving their coal and lumber supply sheds to their new site. Their feed mill, just across from their new location, will not be moved. Their former office and store building will be used for storage purposes.

Colfax, Wash.—A special regional dinner meeting of the Pacific Northwest Grain Dealers Ass'n was held Oct. 22. The guest speaker was Clarence Henry of the Chicago Board of Trade. Mr. Henry, perhaps the best informed man from the Board of Trade about exchange operations, gave interesting information on this subject, later answering problems that were presented to him by many of those in attendance.

Portland, Ore.—A feed mill, two warehouses and a garage will be built by the Dairy Co-op. Ass'n on a large site in the Brooklyn district. The group of buildings will cost approximately \$100,000 and will be of concrete construction. The feed mill will be 50x100 ft. and 80 ft. high. There will be warehouses for both hay and grain in the group, each one story high. The hay warehouse will be 47x160 ft., the grain warehouse 113x119. Bins for holding approximately 65,000 bus. of grain are also provided for in the plans. Work has already been started on a railroad spur which will serve the property.

Pleasant View (Hammer p. o.), Wash.—Virtually complete destruction of the P-V elevator of the Walla Walla Grain Growers resulted from the fire that attacked the structure Oct. 14. The cause of the blaze has not been ascertained. It contained 115,000 bus. of wheat and had a capacity of 130,000 bus. The value of the building itself was estimated at between \$25,000 and \$30,000. Of wood construction, after its purchase the Grain Growers covered the exterior of the structure with galvanized iron. A high wind blowing at the time of the fire carried large sheets of this iron covering a distance of 500 ft. This same wind, blowing from the southwest, protected the adjacent warehouse of Harry Morrison and the elevator of Fred Lasater from catching fire.

PENNSYLVANIA

New Castle, Pa.—John Brown's Sons recently installed a Kelly Duplex No. 4 Ear Corn Crusher & Feeder.

New Castle, Pa.—A new cereal plant for manufacturing puffed wheat, corn, rice and various flaked cereals will soon be in operation here under the management of A. L. Russell.

York, Pa.—Geo. F. Brenner, R. No. 4, has a new Model L Kelly Duplex Hammer Mill and Magnetic Separator.

Felton (R. D. 1), Pa.—The J. C. Jones mill has installed a 69-hp. oil engine on the hammer mill and now has a grinding capacity of 27 bags of ear corn in 25 min. compared with 10 bags with the old engine.

SOUTH DAKOTA

Emery, S. D.—The Wm. Michels elevator is being repaired and repainted.

South Shore, S. D.—The Monarch Elvtr. Co. has started erecting a flour and feed house adjoining its grain elevator here.

Winship (Ellendale, N. D., p. o.), S. D.—The elevator building here is being moved by J. H. Fisch Co. of Barnesville, Minn. A new 20-ton scale and a new driveway will be added to the elevator at its new location.

SOUTHEAST

Cliffside, N. C.—J. T. Blackwell is now using a Kelly Duplex Vertical Feed Mixer, belt drive.

Ramseur, N. C.—M. E. Allen is using a new grader recently bought from the Sidney Grain Machry. Co.

Cleveland, N. C.—S. L. Foster has installed a large grader which he purchased from the Sidney Grain Machry. Co.

Mocksville, N. C.—The Green Milling Co. has overhauled its plant and a new corn cracker and phosphate feed have been installed.

Roanoke, Va.—Lightning came into a motor in the feed mill of the Roanoke City Mills, Inc., recently, causing fire which did considerable damage to the motor.

Norfolk, Va.—The Shenandoah Milling Co., operating mills here and in Shenandoah, has been placed in receivership. Receivers appointed by the court are T. Coleman Andrews, of Richmond, A. A. Roudabush and George Pilcher of this place.

TENNESSEE

Union City, Tenn.—Missouri Grain Co. improved its equipment with the installation of a large Sidney Elevator.

Memphis, Tenn.—Allied Mills, Inc., Chicago, has purchased the plant of the Archer Grain & Milling Co. The plant will be renovated and some improvements made. Robert N. Archer will be associated with the next owner. The property was owned by the Union Planters Bank & Trust Co., and was formerly owned by Embry E. Anderson.

TEXAS

Seymour, Tex.—Wesley Harrison recently installed a large seed cleaner in his plant, purchasing same from R. R. Howell & Co.

Houston, Tex.—The Houston Milling Co. has just completed construction of a new 40x53 ft. eight-story feed plant and corn mill, and 55x80 ft. three-story warehouse. The structure is of reinforced concrete and brick and the new plant has capacity for manufacturing 400 tons of livestock and poultry feeds, and 1,000 bbls. of corn meal daily, reports L. E. Church, who has charge of its operation.

Austin, Tex.—There has been introduced in the House H. B. No. 15 placing an occupation tax on itinerant vendors of any merchandise except that produced on their own farms. This is some kin to our H. B. No. 62 which died on the last sessions calendar, so we have hopes of securing the passage of this bill or reviving our own H. B. No. 62. New concerns admitted into our association are Spur Grain & Coal Co., Spur, Tex., The Morrison Milling Co., Denton, Tex., Fraser Grain & Oil Co., Hereford, Tex. and Kuder Meal Co., Los Angeles, Cal. Application for membership has been received from Castro County Grain Co., Clarence O. Byrnes, pres.-manager, of Dimmitt, Tex. Endorsers of the application are E. G. Barks, Farmers Grain Co., Tulia and A. Galbraith, Galbraith Grain Co., Fort Worth.—G. E. Blewett, sec'y-treas., Texas Grain & Feed Dealers Ass'n.

Sanger, Tex.—Windstorm on Oct. 8 did considerable damage at the Sanger Mill & Elvtr. Co. plant.

McKinney, Tex.—The Collin County Mill & Elvtr. Co. resumed operation Oct. 1 after a temporary shut-down. The large building was renovated and repaired and new machinery installed.

Fort Worth, Tex.—New members recently enrolled in the Texas Grain & Feed Dealers Ass'n are Burleson Grain, Tahoka; Billingsley & Son, Lamesa; Koeninger Grain Co., O'Donnell; George M. Roach Grain Co., Lubbock; E. M. Rogers Co., Fort Worth; Walter Barloe, % Great West Mill & Elvtr. Co., Amarillo; Roy Burrus, Plainview; Farmers Mill & Elvtr. Co., Kress; Ray Griffiths Elvtr. Co., Muleshoe; Heard & Clubb, Petersburg; Henneman Grain & Seed Co., Amarillo; L. C. McConnell Grain Co., Pampa; Maj. H. Rogers, Levelland; Scurry Co. Grain Co., Snyder; J. Frank Triplett, Amarillo; Thornton & Bean Grain Co., Lockney, Tex.; Ben E. Clement & Co., Gatesville; A. Galbraith Grain Co., Fort Worth; A. G. Campbell Grain Co., Fort Worth; Moore Mills, Chillicothe; Henderson Grain Co., Abilene; Farmers Co-op. Soc., Quanah; Ross-Hicks Grain Co., Fort Worth; L. D. Kennedy Grain Co., Abilene; Farmers Grain Co., Hart; H. T. Bibb Co., Inc., Fort Worth; Farmers National Grain Corp., Amarillo; Chas. H. Hitch, Fort Worth; Home Mixed Feed Co., Austin; Devine Mill & Elvtr Co., Devine; R. J. Mangold, Lacoste; M. C. Powell, Anna; Castro Co. Grain Co., Dimmitt; Morrison Milling Co., Denton; Fraser Grain & Oil Co., Hereford; Spur Grain & Coal Co., Spur; Burrus Feed Mills, Dallas, Tex., and Kuder Meal Co. of Los Angeles, Cal.—G. E. Blewett, sec'y-treas.

WISCONSIN

Bruce, Wis.—Jim Buchholz will open a feed store about Nov. 1.

Platteville, Wis.—An addition is being built on the Shilliam Feed Mill.

Evansville, Wis.—Brunsell Co. has installed a No. 3 Kelly Duplex Vertical Feed Mixer, 1½ ton capacity.

Random Lake, Wis.—B. W. Wierman has a new one-ton Kelly Duplex Motor driven Vertical Feed Mixer.

La Valle, Wis.—A new feed mixer and corn cracker have been added to the equipment in the new plant of the LaValle Roller Mills.

Oostburg, Wis.—Theune Bros. are installing a new Diesel engine, and to provide space for the motor, they are erecting a new building as well with two bulk grain storage bins.

Slades Corners, Wis.—Herman J. Seno has purchased the half interest of his brother, William, in the feed mill. He is improving the plant and is building a 32x30 ft. warehouse.

Boaz, Wis.—An explosion of a grist mill at the Anderson Bowen Feed Co., recently, severely injured Carl Anderson, Jr. He sustained a fractured palate bone, bruises and lacerations.

Appleton, Wis.—Liethen Grain Co. is building an underground room in which the grinders will be installed to guard against dangers of explosion. The dustless, air-conditioned room will be 19x30 ft. and will be completed within two months.

Waldo, Wis.—P. F. Buelke recently purchased the elevator and feed warehouse formerly operated by the Farmers Co-op. This property has been closed down for some time and will provide needed storage space for the Waldo Feed Store, owned by Mr. Buelke.

Frederic, Wis.—The Frederic mill has been sold to the Van Dusen-Harrington Co., of Minneapolis and will be operated by the Apple River Milling Co. with headquarters at Clear Lake, whose plans in regard to it are not known. W. C. Stephan and the Frederic Milling Co. will continue to operate in this territory, the stock of the company being moved to the Grantsburg company branch for the present and the operations of the Frederic company will be carried on from the warehouse there. The mill building was owned by the receiver of the bank of St. Croix Falls and was sold by him to the Van Dusen-Harrington Co., the deal having no connection with the Frederic Milling Co. except that it was leasing the mill building from the receiver of the bank.

MILWAUKEE LETTER

A. J. Goede, of Ladish-Stoppenbach Co., and L. E. McClellan, of Cargill, Inc., were elected members of the Grain & Stock Exchange recently.

The Paetow Co. has established a warehouse in Milwaukee for the convenience of outlying feed dealers and has added a line of specialties which will be regularly stocked.

New members admitted to the Grain & Stock Exch. are Reinhold W. Hoth, with Leonard J. Keefe; Lewis E. McClellan, Cargill, Inc., and A. J. Goede, Ladish-Stoppenbach Co.—H. A. Plumb, sec'y.

Walter A. Teipel, for many years vice pres. and general manager, was elected pres. of the Froedtert Grain & Malting Co., Inc., at a meeting of the board of directors Oct. 21. Kurtis R. Froedtert was re-elected chairman of the board; Curt Kanow was named vice pres. He has been sec'y for some time.

WYOMING

Cody, Wyo.—E. R. Loving, who recently purchased the mill and grain elevator is conducting the business as the Cody Mill & Elevtr. Co.

Greybull, Wyo.—Greybull Elevtr. Co. has installed a new scale and repaired the driveway floor to take care of the heavier trucks now used in hauling grain. Also installed a new loading spout for loading trucks on outside of building.—Greybull Elevtr. Co.

Rackets and Racketeers

BY TERRENCE O'KEEFE

Many grain dealers have been made victims of a wide variety of rackets which are costing American business millions. When strangers approach you with any doubtful propositions investigate before you act. It will save you money.

Any workmanlike publication racketeer will tell you that when he really tries, he can easily make a hundred dollars a week at his trade. Sometimes he operates along simple lines and merely collects small sums for advertising space in non-existent publications. At other times he calls on the business man, shows him his ad in a fake publication and a contract for the space supposedly signed months ago. Of course the contract never was signed, the signature is a forgery. But our busy business man has forgotten so many of the things he did months ago that he realizes this may well be one of them. So he gives the fellow a check.

These publication racketeers invariably give names to their fictitious publications that make selling easy. No business man wants to offend the Brotherhood of This-and-That, or any other powerful union group. And he is so accustomed to buying non-earning space in publications of such groups that he rarely takes time to investigate the legitimacy of the new ones that come along. These fake publication salesmen can easily be put out of business if the business man will ascertain if the organization, which is said to be putting out this paper, really exists, and is putting out the magazine.

The City Builder Racket: This racket capitalizes on human vanity. The racketeer usually is an amateur . . . just a fellow citizen who notices the ego of his successful townsmen and decides that they should be made to pay for the privilege of holding their talents in such high regard.

It seems that we are getting out a book—"The Builders of Boostville or Whateveritis." This book is to be placed in the city archives so that generations to come will have the opportunity of knowing just who to thank for the marvels of this great social institution "Our Home Town."

Of course there's a great deal of expense involved in building this big book. And who is to pay for it but these self-same chaps whose photographs and life histories will adorn its pages.

Merchandise Rackets: One of these days you may be approached through the mail or by personal solicitation to take some article of merchandise on trial or for inspection. It will

"RANDOLPH"

OIL-ELECTRIC GRAIN DRIER

The Drier Without a Boiler

ASK THE MAN WHO HAS ONE

THAT'S ALL

MANUFACTURED BY

O. W. RANDOLPH COMPANY

3917-21 Imlay St., TOLEDO, O., U. S. A.

all seem perfectly legitimate. You will be required only to sign a receipt for the item delivered into your hands, which, of course, is a perfectly natural demand. But if you read the receipt carefully you may find tucked away somewhere in the middle of a mess of words some trifling little clause that binds you under contract to purchase a considerable quantity of the merchandise involved. Or you may find a clause that makes the document an acknowledgment of delivery of a large quantity of the merchandise. Your signature on that little slip of paper will obligate you legally.

Of course YOU wouldn't think of signing any document without a careful reading, but, think back and try to remember how many you really signed without reading EVERYTHING on them. If you haven't been hooked you simply have been lucky, UP TO NOW.

Wagon and Truck Lift for Cribbs

The scooter type wagon and truck lift shown in the engraving herewith has been designed to satisfy the requirements of grain elevator operators who have special cribs for storing ear corn.

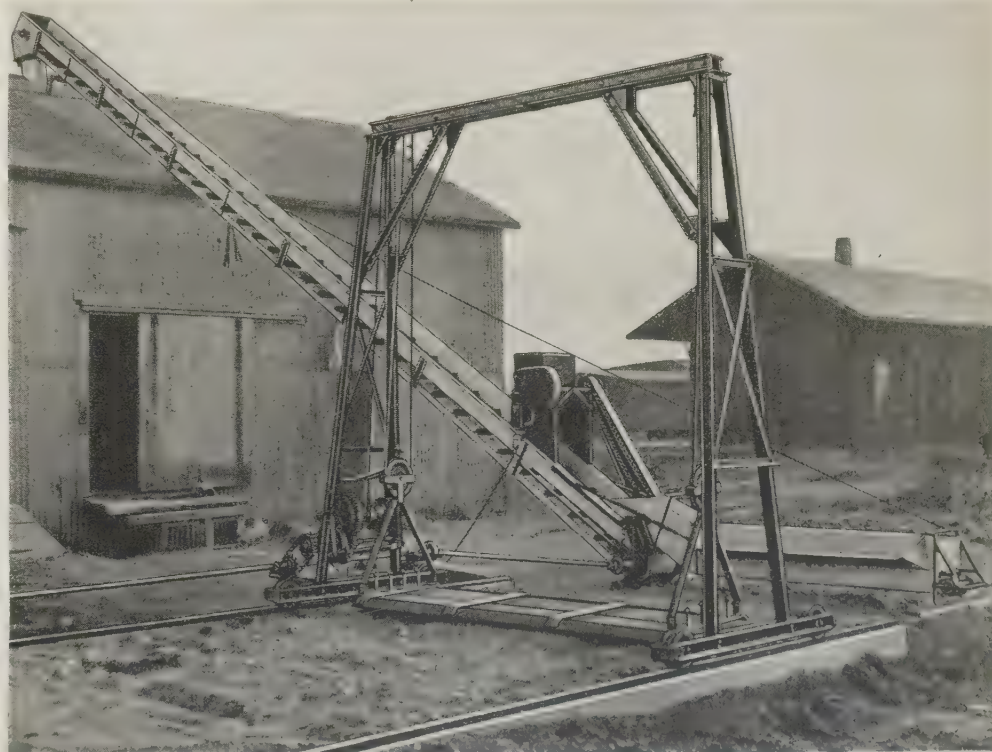
The platform is movable on a track to accommodate the shortest wagons or the longest trucks, and is raised by cables traveling over

pulleys to a windlass. The outfit is weather-proof.

The ear corn elevator also shown will handle soybeans and wheat. Additional information will be given readers of the Journals on application to the manufacturer, the Kewanee Implement & Conveyor Co.

Confidence Will Return

Residents of the famed "dust bowl" of the American Southwest are not the only ones to know what it means to have their eyes, ears, noses and throats filled with dirt and sand and even larger particles of stone. Recently a multitude of traders in all kinds of markets everywhere have been going thru exactly the same experience and finding it not at all to their liking. So it is with open arms that every one interested in wheat, bulls and bears alike, today welcomed the opportunity afforded by a decided falling off in trading operations to take the old wash basin and clothes brush out on the back porch and clean up a bit. It didn't matter so much that moderately low prices were the rule. The important thing was that the brain storm of the last week or so appeared to have spent its full force and that a gradual return of confidence should logically follow.—Hulburd, Warren & Chandler.



Traveling Truck Lift for Grain Dealers' Corn Cribs.

Field Seeds

Hammond, Ill.—Ray B. Ponder will open a seed store.

Fremont, Neb.—The Yager Seed Co. has installed a seed huller, scarifier and cleaner.

Sauk Center, Minn.—Harry Knapp has bought the C. E. Perkinson Seed & Feed Store.

Windfall, Ind.—A drier and storage for hybrid seed corn have been completed by the Mitchell Partnership, Inc.—L.

Princeton, Ill.—The Pioneer Hi-Bred Seed Corn Co. recently celebrated the opening of its large new seed corn drying plant.

Coffeyville, Kan.—Clyde Frazier, proprietor of the Square Deal Seed Co., will erect a warehouse 33x82 ft., costing \$4,000.

St. Louis, Mo.—The Atlas Feed & Seed Co. has opened its new branch seed store, with a complete line of seeds, feeds and pet supplies.

Regina, Sask.—Provincial government purchases of corn and oats for relief will be exempt from the duty of 20c on corn and 9c per bushel on oats, effective Oct. 21.

Jefferson, Ia.—Gust Marten, who has been in the seed business at Ute, Ia., for 18 years, is establishing a branch here. Henry P. Hansen of Schleswig will operate the store at Ute for Mr. Marten.

Des Moines, Ia.—Establishment of a seed treating center here is contemplated by Herman M. Hayes, county agent, who reports that so far this year 47 carloads of Iowa wheat alone have been graded smutty.

Washington, D. C.—Grass seeds are being collected by members of 374 C.C.C. camps. The 700,000 pounds to be gathered will be used to establish erosion control plantings, mostly west of the Mississippi River.

Independence, Ia.—G. L. Risdon, proprietor of the Farmer's Seed & Supply Co., is planning to open a grocery and seed store in Independence. The building is being remodeled and the new store will be opened after Nov. 1.

Knoxville, Tenn.—F. E. Rankin, for 10 years sec'y-treas. of the D. R. Mayo Seed Co., Inc., has resigned and formed the Knoxville Seed Co., and will be joined by O. H. Overton, who has been salesman for the D. R. Mayo Seed Co., the business of which is being continued by Mrs. Dale R. Mayo, president.

Waynesville, N. C.—Seeds, feeds, fertilizer and building materials will be handled at retail and wholesale by the Brown-Noland Supply Co., recently incorporated with \$50,000 capital stock, \$7,000 paid in, by Geo. A. Brown, Jr., for 10 years manager of the Farmers Federation; Wm. H. Smathers, U. S. Senator from New Jersey; Joe Emerson Rose, radio vocalist of Chicago; and Jule Noland, the latter being sec'y-treas., and Mr. Brown president.

Fargo, N. D.—A substantial list of cash prizes has been announced by the Greater North Dakota Ass'n to be awarded North Dakota exhibitors at the International Grain and Hay Show at Chicago. Of the several awards the leader is \$100 for an entry winning a championship.

Liberty Center, Ind.—The hybrid seed corn plant owned by Lester Clark, including 1,300 bus. of seed corn was destroyed by fire on Oct. 20. The fire is believed to have been started by a coal burning drier installed recently. Estimated loss \$9,900.—L.

Grand Ridge, Ill.—The Arthur Walter Seed Co. has been incorporated with \$50,000 capital stock by A. Walter, C. E. Gates and E. C. Walter to deal in seeds of all kinds. C. E. Gates, Harry L. Gates and A. Walter also have formed the H. L. Gates Seed Co. of Camargo with \$50,000 capital stock.

Cambridge, Ill.—Rishel & Lindquist have installed a seed corn drying plant and will have space to store 4,000 bus. They started five years ago with two acres of Pfister hybrids, increasing until now they have 100 acres of hybrid corn ready to be picked. Last year they grew and sold 2,000 bus. of hybrid corn. A furnace is used to reduce the moisture content to 14 per cent.

Norfolk, Neb.—The inventories, fixtures and accounts receivable of the former Henry Field Stores, Inc., which operated stores in Norfolk, York and Sioux Falls, S. D., have been purchased of Maurice Rossman, trustee, Chicago, by the De Field Co., of which Wm. R. De Field, Norfolk, is pres. and treas., and Miss Gertrude Walker, of Norfolk, is sec'y. Mr. De Field formerly managed the Henry Field Co., at Shenandoah, Ia.

Iowa City, Ia.—The Pioneer Seed Corn Co. recently completed an addition 30x120 ft. at Downey costing \$8,000 with a capacity of 1,000 bus. per day. The corn is ear sorted and rechecked before going into the drier where a current of air at 110 degrees reduces the moisture to 12 per cent. The company has plants at Reinbeck, Johnson Station, Rolfe, Durant and Marshalltown, controls the Illinois Hi-Bred Co. at Princeton, Ill., and has a parent corn station at Flora, Ind. By growing parent corn in South America the company is able to advance the production one year.

Eldred, Ill.—The Columbiana Seed Co. held open house on Oct. 19 for its dealers and customers, showing matured hybrid seed corn, shelled, in the ear, and standing in the fields, making comparisons between types and strains. Dr. J. R. Holbert, former corn breeder for the U. S. Department of Agriculture, was the principal speaker of the day, discussing hybrids and hybrid corn production. Many members of the hybrid corn producers' ass'n were present in the crowd of several hundred present to learn more about hybrids, enjoy the substantial dinner served by the company, and inspect the company's new hybrid corn drying and processing plant.

The Kansas weather and crops seminar will be held at the Jayhawk hotel, Topeka, the afternoon and evening of Nov. 5. Dr. Ellsworth Huntington of the University of Chicago will be the guest speaker. The seminar attracts a large attendance of crop statisticians, millers, members of the grain trade, economists and others interested in the relation of weather to crops.

Grass Seeds for A.A.A. Program

New seedlings of red clover or alfalfa, or mixtures containing these seeds, would be counted in achieving any 1938 soil building goal established for a farm in connection with this proposed program only if made with adapted seeds, according to an announcement Oct. 14 by Claude R. Wickard, director of the north central division of the A.A.A., embracing the 10 corn belt states.

The provision concerning new seedlings is especially important in the 10 corn belt states of the north central region where red clover and alfalfa constitute two of the principal soil conserving crops.

Red clover and alfalfa seed from virtually the same sources as were approved for 1937 will be considered as adapted in 1938.

Enforcement of Michigan Seed Law

Commissioner John B. Strange of the Michigan Department of Agriculture calls attention of elevator operators of Michigan that effective Oct. 29, the exemption clause relative to distribution of local seed becomes void as a result of action of the 1937 legislature. After that date all seed offered or exposed for sale for seeding purposes, must be properly labeled as to contents.

Since the enactment of our agricultural seed law in 1923 it never has been necessary for elevators to comply with the tagging, or labeling, requirements of the law on seed which they purchased in their own locality. Under the seed law as effective Oct. 29, it will be necessary to mark all seed, regardless of source.

This is expected to effect an improvement in the quality of seed offered for sale, especially in some areas where the farms are unclean and many of the worst weeds are harvested along with agricultural seeds.

Thatcher's Rust Resistance

Once again Thatcher wheat has demonstrated its ability to resist the ravages of black stem rust.

In 1937, as in 1935, points out Dr. H. K. Hayes, chief of the University of Minnesota farm division of agronomy and plant genetics, black stem rust drastically reduced yields in the spring wheat belt of the United States and Canada. During both these years Thatcher wheat, the new variety first introduced by the Minnesota Experiment Station in 1934, withstood the spread of rust remarkably well and produced good yields when other varieties, such as Marquis and Ceres, were severely injured.

Reported yields of 30 to 35 bus. per acre this year were not uncommon when growing conditions were favorable, states Dr. Hayes. In comparative yield acre trials conducted this season in Yellow Medicine and Norman counties by W. W. Brookins, extension agronomist, Thatcher gave an average yield of about 25 bus. per acre while Ceres yielded 12 bus. These few trials are representative of larger numbers of tests where Thatcher exceeded farm varieties by approximately 50 per cent.

Since its introduction, the use of Thatcher wheat has expanded phenomenally, both in the United States and Canada. Dr. L. H. Newman, cerealist at Ottawa, Canada, reported over 300,000 acres of Thatcher in Canada this year. The variety has been grown extensively in Manitoba. In a recent letter to Dr. Hayes, Dr. J. B. Harrington, former graduate student at Minnesota, now a professor at the University of Saskatchewan, states that Thatcher is proving of value in that province and is at present being considered for even wider use.

Potato delegates from eight states meeting at Chicago recently asked the government to purchase potatoes to raise the price.

Directory

Grass & Feed Seed Dealers

CRAWFORDSVILLE, IND.
Crabbs, Reynolds, Taylor Co., clover, timothy.

GREEN SPRINGS, OHIO
The O & M Seed Co., seed merchants.

PAULDING, O.
Stoller's Seed House, wholesale field seeds.

ST. LOUIS, MO.
Mangelsdorf & Bro., Ed. F., wholesale field seeds.
Scott, T. Maurice, field seeds, carlot originator

Illinois Developing Corn Hybrids

Greater stabilization of the Illinois corn crop appears likely as a result of the use of hybrid varieties. In successive years the total corn grown in the state has frequently varied as much as 100 million bushels, owing principally to differences in seasonal conditions. Hybrid corn, however, has been found to perform better than open-pollinated varieties in unfavorable as well as in favorable seasons, for which reason it may be expected to aid materially in reducing year-to-year fluctuations in yield.

It is estimated that enough hybrid seed was produced in Illinois in 1935 to plant 200,000 acres, and that enough foundation hybrids were planted the following spring to produce seed for at least a million acres provided a normal yield was obtained. Under C. M. Woodworth and W. J. Mumm, Plant Breeding, continued studies in the breeding of corn for disease resistance and yield have been made, and in view of the rapidly increasing interest in hybrids these have had first attention the past year. Co-operating with the U. S. Department of Agriculture in field tests at Bloomington, the Experiment Station has distributed some foundation single crosses for hybrid seed production to small growers without facilities for producing such seed for themselves. The seed so distributed, however, has constituted but a very small percentage of the seed used for producing hybrid corn in Illinois.

Most of the breeding work centered about the production of superior inbred lines that transmit valuable qualities to the crosses in which they enter. Qualities such as good root systems, sturdy stalks, high yield, high grain quality, heat and cold resistance, insect resistance, fertilizer response, low ear, and good husk covering are carried and transmitted by the different inbred lines in commercial use, but none of them contain all these good qualities.

Many new single-cross and double-cross hybrid combinations were made in order to study the effect of introducing new inbred lines into the different combinations and to improve further the commercial hybrids that are avail-

able. This crossing program was enlarged by making use of several good inbred lines developed by corn breeders of neighboring experiment stations.

All breeding stocks were produced in much larger volume than in previous years, not only because of a favorable season, but also by making use of several isolated fields. Strip tests were widely scattered in the state and, along with the performance tests, were used in getting information about the adaptation of hybrid combinations.

Seed of 86 double-cross hybrids, 78 of which represented new combinations, was produced. About 2,800 pounds of this seed was distributed over the state in the spring of 1936 for testing. About 2,000 pounds of single-cross hybrid and 270 pounds of foundation inbred seed were produced. Much of this seed has been used in furthering the hybrid-corn program in the state.

About 600 pounds of double-cross hybrid seed was distributed in the spring of 1935. As a result several inbred lines developed at the Illinois Agricultural Experiment Station proved to be valuable in hybrid combinations. Inbreds 5120, 4211, 4226, and 5675 gave the most promise. These inbreds were included in many of the new combinations made up for testing in 1936.

The season was favorable for the study of lodging. Much lodging was caused by attacks of the southern corn rootworm. Corn that was frozen before it was matured also tended to lodge badly before harvest time. Crosses containing certain inbreds were more susceptible to injury by the rootworm than were other hybrids made up of different lines. Resistant hybrids apparently were able to re-establish themselves after a part of their roots were cut off. Inbreds 4226 and 5675 indicated that they had especially good root and stalk quality.

Several hybrids were entered in silage tests. Silage from hybrid corn contained a larger proportion of ear and leaves and not so much stalk as silage made from open-pollinated corn. In addition it was easier to harvest because it stood up better.

Hybrid Corns Vary Widely.—In an attempt to keep up with the demands for seed, corn breeders and seedsmen are making new hybrids each year. These need to be tested for performance in different areas of the state to determine their range of adaptation. Such tests were conducted co-operatively in 1935.

Of the 274 different kinds of corn grown, 202 were hybrid and 72 were open-pollinated. Hybrids were found to differ greatly in their relative productivity and in their adaptation to different sections of the state.

In all cases the better hybrids lodged less and produced larger yields of sound grain than the open-pollinated varieties. In northern Illinois the five best hybrids yielded 16.7 bus. more sound corn an acre than the five best open-pollinated varieties as an average for three fields; north-central section, 19.8 bus. more as an average for three fields; central section, 20.2 bus. more as an average for three fields; south-central, 13 bus. more as an average for two fields; and southern, 6.9 bus. more as an average for two fields.

For the state as a whole, the average yield of sound corn of the five best hybrids was 84.2 bus. an acre. The corresponding yield of the five best open-pollinated varieties was 69.2 bus.

an acre, or 15 bus. less than the average yield for the best hybrids.

Hairy Vetch a Soil Improving Crop

By A. D. JACKSON, of Texas Exp. Sta.

In general hairy vetch has been found to be the best adapted of the winter legumes for the sandy lands of northeastern and eastern Texas and when properly inoculated, grown, and plowed into the soil, profitable increases in the yields of cotton on these lands have resulted. At the Tyler station, cotton following the vetch treatment made 38 per cent more than that on the untreated plats. At Nacogdoches this gain was 31 per cent and at College Station it was from 20 to 25 per cent. When the vetch crop was fertilized with phosphate fertilizer (0-8-4) the cotton yield was increased 45 per cent at College Station and 42 per cent at Nacogdoches. The addition of nitrogenous fertilizer to the cotton following the vetch crop which received an 0-8-4 fertilizer produced an increase of 61 per cent at Nacogdoches. In general the vetch tends to add nitrogen so that the use of a nitrogenous fertilizer is not necessary.

Other crops than cotton have made increased yields following the plowing under of a crop of vetch. Those crops that continue to grow till late fall receive more benefit than corn which seems to complete its growth before the benefits of the soil-improving crop are fully available. Some marked benefits, however, were noted at Tyler when this year's corn followed last year's vetch application and showed 35 to 45 per cent increase. A crop of goose neck sorghum at the Tyler station following the plowing under of a nine-ton crop of vetch made 15.2 tons as against 6.2 tons on the untreated plat. This is a gain of 250 per cent.

The leguminous crops, when they have been properly inoculated, harvest nitrogen from the air and therefore offer some opportunity to add nitrogen to the soil to good advantage. This advantage cannot be secured, however, without plowing in these leguminous crops and incorporating them into the soil. If they are harvested and carried away from the farm much of the nitrogen which they required in growing will be lost to that land. They may, however, be profitably grazed by livestock and the residue and droppings when plowed under will improve the nitrogen content of the soil somewhat, although not so much as if the entire crop is plowed under.

Drying Tough Wheat

E. B. Ramsay, chairman of the Board of Grain Commissioners for Canada, approves the mixing of damp wheat with straight grades when properly dried. He says:

One of the complaints of the producers in the marketing of wheat, particularly in years of excessive moisture, has been the spread between the price of tough and straight grade grain. Elaborate investigations were made by the national research council at the request of the Board of Grain Commissioners upon methods of drying grain. The artificial drying of grain, which had caused deterioration in quality, was carefully investigated and a proper technical procedure established. As a result of their study, the research council advised the Board that, so long as it was not carried to excess, tough grain might safely be mixed with grain of a straight grade as a process of drying.

Generally speaking the policy of the Board has been to allow this arrangement to stand so long as the spread between tough and dry has been less than the actual charge for drying the wheat would amount to.

The United States Supreme Court on Oct. 11 dismissed three suits, by the Chicago Mercantile Exchange, the Chicago grain commission merchants and the Kansas City Board of Trade, attacking the constitutionality of the Commodity Exchange Act

RUDY - PATRICK SEED CO.

KANSAS CITY, MO.

BUYERS — SELLERS

Clover, Alfalfa and Timothy Seeds

OFFERS SOLICITED

We are in the market for
all kinds of

FARM SEEDS

Send samples for highest bid
to our nearest office:

SIoux CITY, IA.	IOWA CITY, IA.
NORFOLK, NEB.	MANKATO, MINN.
SIoux FALLS, S. D.	CARROLL, IA.
BILLINGS, MONT.	

MICHAEL-LEONARD SEED CO.

formerly Sioux City Seed Co.

ED. F. MANGELSDORF & BRO.

Buyers and sellers of

Sweet Clover, Alfalfa, Lespedeza, Clovers, Timothy, Grasses, Fodder, Seeds, Sudan Grass, Soy Beans, Cow Peas
St. Louis, Missouri

CRABBS REYNOLDS TAYLOR CO.

CRAWFORDSVILLE, IND.

GRAIN

Clover and Timothy Seeds

Get in Touch With Us

O & M

DEPENDABLE

FIELD CORN	SWEET CORN
SEED OATS	SEED BARLEY
GARDEN SEED	GRASS SEED

THE O & M SEED CO.

GROWERS GREEN SPRINGS, OHIO

Soybeans a Coming Crop

By J. W. CALLAND, Fort Wayne, Ind., before Ohio Grain, Mill & Feed Dealers Ass'n

Fifteen years ago there were less than one-half million acres devoted to soybeans in the U. S., in 1933 three and one-half million acres, in 1934 four and one-half million acres, in 1935 almost six million acres, in 1936 five million six hundred and eighty-five thousand acres, and in 1937 six million two hundred thousand acres.

Production and Processing of Soybeans

Crop	Bushels Harvested	Bushels Processed
1933-34	11,000,000	3,000,000
1934-35	19,000,000	9,000,000
1935-36	40,000,000	25,000,000
1936-37	30,000,000	20,000,000
1937-38	44,000,000	30,000,000

Eight years ago, five Illinois counties represented the soybean processing industry. Today it has spread over much of the corn belt. The great increase in processing capacity the past two or three years is partly due to new processing mills, partly due to increased capacity of existing mills, and also partly due to the entry into the soybean processing field of a number of hydraulic mills formerly used for processing cottonseed and linseed. It is reported that more than fifty new expeller units have been installed in the past year for separating the oil from the meal. There have been in operation this year between forty and fifty mills processing beans. These mills now have a combined capacity of 55,000,000 bus.

We have seen the commercial production of soybeans jump from almost nothing to better than 40,000,000 bus. in a few years, and the processing capacity jump from a few million bushels annually to 55,000,000 bus.

The great increase in plantings in 1935 may be partly explained by the fact that more than 27,000,000 acres had been shifted from surplus crops thru government adjustment contracts. This represented about one out of every twelve acres of cultivated land in the U. S. Naturally, much of this shifted land went into legumes and was a factor in increasing the acres planted to soybeans. Under the soil conservation program adopted in 1936, soybeans were classed as a soil depleting crop, and there was not the incentive as formerly for the farmer to increase his acreage, with the result that approximately one-half million less acres were planted to beans in 1936.

The price of a bushel of soybeans is not so much influenced by the price of other grains, but, instead, is largely determined by the price of linseed and cottonseed oil and meal. One cent increase in the price of oil means eight cents in the price of beans, while \$1 increase in the price of meal means but 2½ cents in the price of beans. With 2,600,000 tons of cottonseed meal in 1936 and only 475,000 tons of soybean meal, it is readily seen that the price of beans depends largely on the price of cottonseed. This year the cotton crop is estimated at 16,000,000 bales, the largest in many years, and this is definitely reflected in the present price of soybeans.

Another vital factor is the importation of soybean oil and meal, as well as other competitive oils, into this country. Our annual consumption of fats and oils is 9,000,000,000 lbs., of which we produce but 7,000,000,000, leaving us dependent on foreign countries for about 2,000,000,000 lbs. The price at which these can be imported into this country naturally influences the price of our home-grown products.

One of the newest developments is the use of soybean casein for making synthetic wool. A factory in Italy is now producing synthetic wool yarn from coagulated skimmed milk. One pound of coagulated milk produces a pound of wool. Following the production of rayon, this is the second man-made fabric to be produced after depending for thousands of years on natural fibers.

For centuries the Chinese have added twice the volume of water to soybeans, boiled them for one-half hour, ground and filtered them, and produced soybean milk. People of the Far East use soya milk for cooking purposes, serve it with most every meal, use it in their beverages, and from it produce a curd which is one of their most important foods, taking the place of meat almost altogether. Soya milk is now produced by at least five or six firms in this country, and can scarcely be told from cow's milk. Many hospitals and universities recommend it for the feeding of babies. Scientists feel that casein from this soya milk will lend itself to the manufacture of wool, even better than that from cow's milk.

The products derived from beans at the processing plant are soybean oil and soybean meal. The oil goes into seven or eight distinct industrial fields, each requiring its own refining

process. The main fields are the manufacturers of edible products, the makers of compounds and vegetable shortenings, the paint and varnish industries, soap manufacturers, linoleum factories, and the makers of printers' ink.

The meal goes mainly for animal food, human food, glue, casein and plastics. However, the list of other uses is a long one. It is interesting to note that Germany imports annually from the Orient 60,000,000 bus. of soybeans, but exports no oil or meal, all of these products being further converted into commercial uses. The same is true of various other European countries, altho they require fewer beans than Germany.

The cost of producing a bushel of beans in Illinois has been reduced from \$1.16 in 1930 to 52c in 1937. If the average Dec. 15 market price of soybeans is as much as 70c a bushel, farmers can produce the crop at a profit over and above the cost of production, provided they get a yield of 25 bus. an acre or more.

However, for fear that I may be accused of being over-sold on the humble soybean, it is well to remember that even this country's production today of soybeans is barely 5 per cent of the world's total production. The Manchurian production alone is estimated at 165,000,000 bus. for 1937. While the surplus of the big soybean crop in 1935 was readily exported to Europe, due to trouble in the Orient, it should not be overlooked that Europe normally gets its main supply of beans from Manchukuo. The present unsettled conditions in the Far East may right themselves and Japan will put new lands to producing soybeans. Also, remember that, regardless of the constant exploitation of the hundreds of uses for the products of the soybean, 90 per cent of the meal produced must still find a market in feeds. For instance, probably all the soybean meal used in plastics the past year would not exceed one million pounds, or 500 tons, which is less than three days' output of one processing plant at Decatur. Linseed and cottonseed products will continue to largely regulate the price of the meal and oil from the soybean.

In my opinion, the greatest need of this rapidly growing industry, is enlarged and continued research to determine new uses and better methods of growing the crop. The Soybean Research Laboratory, recently established at the University of Illinois, with the U. S. Department of Agriculture and twelve soybean growing states co-operating, may go a long way toward supplying this need. Immediate objectives of the research program are, first, to determine the variation in composition of soybeans resulting from differences in varietal, soil, and climatic factors; second, to improve the present industrial uses, and develop new industrial outlets for soybeans and soybean products. From these studies it is hoped that data will be secured which will permit the selection of varieties of beans, soil and fertilizer combinations which will yield oil, protein, and other materials most economically. Much additional work must also be done by the state experiment stations, universities, extension departments, and grain dealers of the corn belt, to point out to the farmers, the dairymen, the poultrymen and the livestock producers of this area the value of this superior new protein feed—soybean oilmeal—grown right on their own farms. In other words, if corn belt farmers are to continue to increase the production of soybeans on their farms, they must consume on those same farms the bulk of the soybean meal produced in processing their beans.

D. D. Fennell, Chicago, was elected pres. of the National Safety Council at the annual meeting, Oct. 13. W. H. Cameron, Chicago, was re-elected managing director.

Corn amounting to 26,930,000 bus. was imported during July and August against 2,850,000 bus. in July and August, 1936, as reported by the Bureau of Foreign and Domestic Commerce. Imports now have ceased and exports are being made to Canada.

BE PREPARED!

HESS DIRECT HEAT DRIERS

ENABLE YOU TO HANDLE

NEW GRAIN WITHOUT LOSS

DON'T DELAY

WRITE FOR FREE CATALOG.

HESS WARMING AND VENTILATING CO.

1211 SO. WESTERN AVE., CHICAGO

New!

20th Edition

Feeds & Feeding

by
F. B. Morrison

This edition has been entirely rewritten and revised to contain the latest information on live stock feeding and nutrition. Entirely new compilations of recent analyses of American feeds are presented in the Appendix Tables. Extensive data are presented concerning the mineral and vitamin content of important feeds.

The only authoritative book on the subject of animal feeds and feeding. The result of over 38 years of exhaustive work in experimentation.

Its three parts, each divided into numerous chapters, cover "Fundamentals of American Nutrition," "Feeding Stuffs," "Feeding Farm Animals." This new edition contains approximately 40% more material than the 19th edition, and contains 1,156 pages, including 95 informative illustrations. This book will enable any grinder and mixer of feeds more intelligently to suggest and compound worth while rations. Beautifully bound in black keretol, durable covers; weight 5 pounds, price \$5.00 plus postage. Send for your copy now.

Grain & Feed Journals

Consolidated

332 S. La Salle St.

Chicago, Ill.

Feedstuffs

Portland, Ore.—Many feed dealers are dissatisfied with the feed inspection service as now conducted by the state department of agriculture and would prefer a return to the former system as more efficient.

Portland, Ore.—The Board of Governors of the Oregon Feed Dealers Ass'n recently decided to hold monthly meetings of the Board the second Friday of each month, and to hold the annual meeting May 13, 1938.

Alfalfa meal production during September of about 28,100 tons was almost 4,000 tons below August output. Production June thru September this season totaled 117,100 tons compared with 114,200 tons last year, and only 78,300 tons for the like months in 1935. —U. S. Dept. of Agriculture.

Commercial Feeds in Kentucky

As a result of the drouth and with the return to more normal economic conditions, there was marked increase in the volume of commercial feeds sold in Kentucky during 1936. It is estimated that approximately 350,000 tons were consumed, an increase over 1935 consumption of more than 125,000 tons, and at an estimated retail cost to the consumer of more than \$15,000,000.

The heavy demand and high price of feeds created much unscrupulous competition in the business among certain manufacturers. Those who adulterated and misbranded feeds were required to withdraw a large tonnage of such feeds from Kentucky markets.

Fifteen suits were filed in the State courts against firms for fraudulent practices, which resulted in judicial decisions for the Department of Feeding Stuffs. In addition, 45 registrations of brands of feeds and right to ship feeds into Kentucky, representing 12 companies, were canceled because of adulteration and misbranding. When these companies took their feeds off the market, changed their formulas, made refunds and gave assurance of future compliance with the law, most of them were reinstated and placed on probation, contingent upon their co-operation and future conduct of their business in the State.

Imitation hominy feeds have been given special attention during the year. Small corn mills within this State have been making imitation hominy feeds which are a blend of different corn by-products, often of inferior quality. Such feeds were sold in competition with bona fide hominy meals. To cope with the situation, sufficiently high chemical standards were adopted by the Department of Feeding Stuffs to prevent the use of cheap and inferior products in these feeds.—*Bulletin No. 14, Ky. Ag. Exp. Sta.*

A Midget Hammer Mill

A. T. Hendrix, assistant professor of agricultural engineering at the University of Tennessee, has developed a 4x10 inch hammer mill using ½ to one horse power and operating without the supervision of an operator.

This mill is 4 in. wide, with 11-in. swing, and is of the conventional swing-hammer type, with 10 hammers. The hammers are suspended on rods passing thru circular disks. The disks are clamped on the mill shaft, which in turn is carried by two double-row, self-aligning ball bearings. The mill has semi-automatic tangential feed. The screen, which is semi-circular, thus giving 180 deg. of screen arc, is readily replaceable. The mill may be belt driven, or it may be direct connected to a 3600-rpm. ½ to 1-hp. motor.

The automatic feeding mechanism consists essentially of a vibrating feed table, table supports, drive belt, off-balance pulley, and shaft. The pulley and shaft are free running. The material being ground, which may be oats, shelled corn, or any of the small grains, is fed onto the feeder table by a spout from the storage bin, and due to the vibratory motion of the table, is carried at a uniform rate into the grinding compartment. The vibratory motion is imparted to the table by the free-running, circular, off-balance pulley. The direction of vibration of the table is determined by the table supports which are four ½-in. rods attached rigidly at both ends. The table is thus "floating" on four small flexible supports. The amplitude of vibration required is very small and is not at all critical.

The rate of feeding is controlled principally by regulating the amplitude of vibration of the feed table. The direction of table vibration is perpendicular to the wire supports, with no appreciable component parallel to the wire. This vibration causes the grain to move uniformly along the smooth surface of the feed table in a series of slight pitching motions, even when the table is inclined as much as 20 deg. upward from the horizontal. The rate of feeding is controlled by the current demand of the motor. This is accomplished by means of a solenoid in series with the motor. This solenoid is attached to a control lever, which engages the shaft bearing of the vibrating pulley when the motor becomes fully loaded, and thus reduces the amplitude of vibration of the feed table. Should the motor become overloaded for any reason the control lever is brought to bear more heavily on the shaft bearing, and thus stops any appreciable vibration of the feeder.

Feed Prices

The following table shows the closing bid price each week for January futures of standard bran and gray shorts, spot cottonseed meal, soybean oil meal, and No. 1 fine ground alfalfa meal, in dollars per ton and No. 2 yellow corn and No. 2 yellow soybeans in cents per bushel:

		Minneapolis		Kansas City	
		Bran	Shorts	Bran	Shorts
Aug.	14.....	19.50	22.00	17.50	19.00
Aug.	21.....	18.00	18.50	17.15	19.00
Aug.	28.....	17.00	17.25	16.65	19.00
Sept.	4.....	17.00	17.00	16.25	19.35
Sept.	11.....	18.50	18.50	17.15	20.00
Sept.	18.....	19.00	21.00	17.75	19.75
Sept.	25.....	18.50	21.50	17.15	20.00
Oct.	2.....	19.00	21.00	17.65	20.00
Oct.	9.....	18.00	20.50	17.50	19.50
Oct.	16.....	19.00	21.50	18.35	20.00
Oct.	23.....	20.00	20.00	18.60	20.00

		St. Louis		Chicago	
		Bran	Shorts	Soybeans	Meal
Aug.	14.....	19.65	21.00	No sales	34.00
Aug.	21.....	19.15	20.75	No sales	33.00
Aug.	28.....	18.75	20.75	No sales	33.00
Sept.	4.....	18.50	20.85	No sales	31.00
Sept.	11.....	19.10	21.60	No sales	28.20
Sept.	18.....	19.95	21.85	No sales	34.20
Sept.	25.....	19.20	21.50	No sales	34.20
Oct.	2.....	19.70	22.00	No sales	28.00
Oct.	9.....	19.30	20.75	.85	29.70
Oct.	16.....	20.60	21.60	.97	27.70
Oct.	23.....	20.75	21.50	.99%	29.20

		Cottonseed Meal		Kansas City	
		Ft. Worth	Memphis	City	Chicago
Aug.	14.....	33.00	25.50	22.50	105
Aug.	21.....	31.00	23.00	22.00	101
Aug.	28.....	26.00	19.85	22.00	99½
Sept.	4.....	23.00	20.80	21.50	103½
Sept.	11.....	23.00	20.75	21.50	105
Sept.	18.....	23.00	20.75	21.50	106¼
Sept.	25.....	23.00	20.15	21.50	111
Oct.	2.....	23.00	21.75	21.50	90
Oct.	9.....	21.00	20.75	22.50	68
Oct.	16.....	26.00	22.00	22.00	66
Oct.	23.....	25.00	22.50	22.00	63

Recent Developments in Mineral Feeds

By Dr. J. S. HUGHES, of Kansas State College, Manhattan, Kan., before Mineral Feed Mfrs. Ass'n at Chicago

[Continued from page 266 of Sept. 23 number.]

The function of iron in the body is to be built into hemoglobin, and it controls that important function of carrying and distributing oxygen thruout the tissues. Other conditions in the diet must be properly met or iron alone will not build hemoglobin. The people at Wisconsin discovered that copper in the diet of an animal would enable that animal to utilize its iron. It was very interesting to me to recall an experiment in our own laboratory. A Doctor West was working with me at Manhattan in 1922, some years before the work at Wisconsin, on the question of whether or not iron could be used in the inorganic form as well as the organic. To be sure the rats got only the metals that we wanted them to get and would not get iron off the cages, Mr. West took considerable time and lined all his cages with copper, which happened to be the very element that made the rats use the iron. We found that the rats could use iron very nicely. Had we not lined our cages with copper, we would have found they would not have used the inorganic iron. Showing what apparently little changes in an experiment can change the entire outcome, and just how much background a person should have if he goes to interpret the results of feeding tests.

Iodine.—One of the important controls of the body is found in the thyroid gland of the neck. The thyroid in building the hormone has to have iodine to build into that compound. Without that no animal that we know of can live and be normal. The question of to what extent iodine deficiency exists in live stock is still disputed or unsettled. In Kansas, so far as I know, there has never been a test that would tell whether iodine would improve the quality of the live stock or not. We know positively that hogs grown in that section, and dairy cattle, without iodine supplements go into the show ring and win good prizes, showing they do produce good animals without the addition of iodine. But that does not say that iodine might not be of value to some livestock.

It is possible to go into a community where iodine is on the borderline and find some animals in perfect condition and the others not in such perfect condition but not showing any external symptoms of the lack of iodine.

So the question arises, should the man in Kansas buy iodine for his feed? The man who has iodine to sell says it is perhaps a good form of insurance to put that iodine in. One man may not need it and the other man will. Take it as an average, the whole group might benefit. That is still to be determined just as many of these other problems must be determined. It will only be answered when someone is willing to put up the money to carry out an experiment over a long enough period to find that out. And that is not three months or six months. It means an experiment with a considerable group of animals over several generations. I am definitely of the opinion that you may have mineral deficiencies that would not show up even in the first generation, but if you were to continue the animals on that deficient diet you might have unfavorable results if continued thru four, five or six generations.

The situation of iodine is not different from others. There is still much work must be done. It is very encouraging that the Department at Washington this last year began an effort to organize or bring about a co-operation of the State Experiment Stations on a long-time plan for determining exactly what minerals are deficient in the soils, especially these rarer min-

erals, what effect these deficiencies have upon plants and what effect they have upon the animals. Such a program has been in effect for four or five years in some of the European countries but there has not been any concerted action in this country. Since it is coming now from Washington, it looks as tho we might get some of the Experiment Stations interested to a sufficient extent that enough work will be done and some of these questions may be answered.

Manganese.—Perhaps the element that is in the spotlight at the present time is manganese. At the poultry meeting at Madison a couple of weeks ago there were at least three papers devoted to this question. A year ago I announced to you here at the meeting even before it was in the press that manganese in small quantities would prevent a condition in chickens known as slipped tendons. Since that time it has been shown that manganese is essential in the poultry diet, not only to prevent slipped tendons, but for all other normal production of poultry. If you are interested in the work, consult the men at Michigan, Cornell, Oklahoma and Kentucky. I may have missed some of the states but those are four that come to my mind.

Manganese is found in widely varying amounts in different feedstuffs. But, unfortunately, the by-products that go into the commercial poultry mash or the feeds made right on the farm are very low in manganese. There should be to prevent slipped tendons a minimum of about 35 parts per million of manganese.

If manganese is not in the poultry feed, the hens will lose body weight and will not produce a great many eggs. Hatchability will be low and the chicks that do hatch will be very peculiarly formed. You can write for a Kentucky bulletin if you want to get information concerning this. These chickens will have short legs, short wings, a short beak, a parrot-like beak, and the down will not be normal. You will have very heavy death losses just before the chicken should hatch. All you have to do to prevent this condition is to get a little manganese in the poultry mash.

Now the question is, how are you going to put it in? A simple way is to add a little of the manganese salt, about three or four ounces per ton. It is pretty hard for the farmer who mixes by hand to mix such small amounts into the feed but the feed manufacturer should be able to do it, nicely. Limestone varies greatly in the amount of manganese it contains, from nothing up to a thousand parts per million. That is the reason nutrition workers got such contradictory results relative to slipped tendons. One investigator said if you were to put in limestone it would stop the slipped tendons, and another said limestone would not prevent the condition.

Limestone is not the name of a chemical compound, it is the name of a mixture nature has laid down. Calcium carbonate is the important thing but not the only thing found in limestone. In fact, the variation in limestone furnished the clue to Cornell that enabled them to work this out. They found one limestone did prevent slipped tendon and one did not prevent it so they found these two samples of limestone differed in their manganese content.

There is no doubt but what manganese plays an important part in the life of other animals but it hasn't yet been brought to the attention of the public like it has in poultry. Poultry feeds are so deficient in manganese and the

number of poultry is so great that the difficulty was made apparent where it might not be made apparent in dairy cows.

Magnesium.—The next element that is receiving a tremendous amount of attention at the present time is magnesium. It is an interesting thing that in one of the states a law was passed not long ago specifying that limestone could be used in feeds but it should not have magnesium in it, with the idea it is harmful. Magnesium is absolutely essential. This just shows how queer things may get into the laws.

Just at the present time there is a ruling in one of the States that no rock phosphate at all can be used in mineral mixture feeds because it is liable to carry too much fluorine. That question hasn't been proved at all. It undoubtedly will take some adjustment to get this problem worked out.

Spasms from Lack of Magnesium.—Over at Michigan the feeding of calves on milk alone brought to light the importance of magnesium in the diet of farm animals. If a calf is fed on milk alone, plus sufficient iron and copper to prevent anemia, the calf will develop spasms in from six to twelve months. That condition bothered nutrition workers for a number of years. Out at Kansas we tried the experiment and we were able many times to grow calves without the spasms. Up at Michigan the calves almost invariably had the spasms. Dr. Huffman, in hunting around to see what was the matter, found that these calves' blood contained too little magnesium. Ordinarily they should have from 2½ to 3 milligrams of magnesium per 100 cubic centimeters of blood. The amount of magnesium in the blood of the calves fed milk gradually dropped. When the amount dropped down to less than 1, usually those calves go into violent spasms. All that is necessary to do to prevent this condition is to put magnesium in the diet.

But that was not the most important thing he discovered in my estimation. He discovered that the lack of this magnesium brought about very serious conditions in the blood vessels and the kidneys of these animals.

Dr. Greenberg of California reported at the Biochemical Meeting this spring that he had been able to produce a similar condition in rats as far as the kidney was concerned. The important thing was this, that in a diet where the calcium and magnesium were properly balanced and in about the minimum amount needed for the animal, if he pushed the calcium up in that diet the magnesium went down, resulting in a magnesium deficiency. This shows again the danger of feeding excessive amounts of any particular element.

Magnesium has a certain work to do in the body and nothing else can take its place. If you push it too low by not having it in the diet or crowding it out with calcium, you are going to have serious difficulty. That is all new work in the last year or so and you will hear a lot more about it as the years go on. It is too early to make any prediction at all but it would be very interesting if it developed that some of the diseases of the kidney and of the arteries was merely a deficiency of magnesium in the human dietary. It is possible but there is no proof of it at this time. It is something to look forward to in research.

Dr. Huffman brought up another very interesting thing and that is that in supplementing his milk with magnesium he gets better results by using a product having magnesium in it such as alfalfa hay or the grains that have magnesium in them, that he does by using the same amount of the inorganic compound, again bringing up that very much discussed question of whether or not any of these elements are better utilized in the organic than the inorganic form. There have been some very heated discussions over it, particularly with relation to iodine. Whatever the answer may turn out, the work that Dr. Huffman had done with magnesium indicates that certain plant materials containing magnesium give better results than an equal amount of magnesium fed as the oxide. We

must remember that when he is feeding these plant materials he is feeding other things than magnesium. Is it a difference in the magnesium or is it something else in the plant aiding in the use of magnesium?

There are many other elements that should be studied. Cobalt is getting quite a bit of study; zinc, aluminum, silicon, fluorine, and on down the list. I have mentioned just a few where enough work has been done that I thought it would really interest you. I would say the really new work during the past year was on manganese and magnesium.

Feed Mill Installed by Peck Elevator

When Guy M. Rowell, head of the Yale Elevator at Yale, Mich., bought the Peck Elevator at Peck, Mich., which he had been operating under lease for a number of years, he immediately brought the house up to date. Much of the old machinery in the 12,000 bu. elevator on the D. C. & S. was replaced, including the grain cleaner and elevator legs. At the office a Fairbanks 10-ton truck scale with a reinforced concrete deck, replaced old weighing equipment.

The major improvement, however, was construction of a feed mill in the space between the office and the elevator. This one-story and basement, frame, ironclad structure is 22 ft. square, and has a canopy and loading dock on the elevator driveway side.

Built into the loading dock is a double receiving hopper, the upper half leading to a small corn sheller under the feed mill floor which empties shelled corn into a small leg for elevation to the building's work floor; the lower half leading thru a Duplex corn crusher into the magnetic separator protected throat of a Blue Streak hammer mill in the basement. The hammer mill is driven by a 30 h.p., direct-connected, inclosed motor. Both mill and motor rest on a specially cast concrete foundation.

Shelled corn elevated by a short leg from the basement to the work floor can be sacked off or diverted back to the hammer mill. Meal from the hammer mill is blown to a collector on the work floor that has its air escape thru the roof.

The feed grinder is operated at peak capacity thru use of the crusher that levels the flow of materials into the mill, and an ammeter on the work floor that registers immediately any dangerous overload.

Feed mixing is done with a half-ton Sidney vertical feed mixer at one side of the work floor.

In charge of the Peck Elevator, its grain handling and feed grinding operations, is Roy Beers.

Production of Brewers and Distillers Grains

Brewers dried grains output totaled about 10,100 tons during September, based upon reports from the principal producers. This compares with output of 11,100 tons during August and 13,500 tons in July. The decline in output is largely seasonal.

For the three months July to September, inclusive, the production was 34,675 tons, and shipment 35,735 tons. A year ago production was 33,210 tons, and two years ago 24,830 tons.

Distillers dried grains production continued at a low level during September with only 12,400 tons turned out compared with 20,600 tons last year. Many plants were closed because of shortage and relative high prices of corn. Closed plants are scheduled to re-open with the arrival of new corn in volume.

For the three months July to September inclusive production was 34,280 tons, against 62,340 in 1936, and 43,140 tons during the corresponding months of 1935, as reported by the Bureau of Agricultural Economics.

Quantity of Vitamin G Required by Chicks

Heuser, Wilgus and Norris of Cornell have found that during the first eight weeks of life in the case of single comb white Leghorns there exists a fairly close relationship between the number of units of vitamin G per gram of gain, the number of units of vitamin G per gram of weight, the ratio of body-mass to gain, the units of vitamin G per 100 grams of feed and the instantaneous rate of gain.

The amount of feed consumed per bird per week increases in direct relation with age and is roughly inversely proportional to the instantaneous rate of gain.

Considering normal growth and food consumption, to supply the necessary amounts of vitamin G for white Leghorn chicks the rations should contain approximately the following amounts of vitamin G per 100 grams of feed for the second to eighth weeks, respectively: 350, 290, 240, 200, 160, 130, 100.

An increasing total number of units of vitamin G are required per week for each chick until 5 weeks of age after which time there is a decrease until the eighth week. The units of vitamin G ranged from 325 to 415.

The close relation between units of vitamin G per gram of gain as well as the relation of units of vitamin G per gram of weight and the ratio of gains to mass suggests that vitamin G is closely related with growth and that the requirement for growth is much greater than the requirement for maintenance.

Vitamin A Added to Feeds

Prominent feed authorities like Prof. F. B. Morrison in Feeds & Feeding, express the conviction that both carotene and vitamin A are destroyed by oxidation, and that green hay and concentrate mixtures lose a large part of their vitamin A content when stored for long periods.

In view of this fact, and of the serious consequences on the health and well being of livestock when the amount of vitamin A in the feed is insufficient to meet feeding requirements, it would seem entirely logical that locally ground and mixed feeds, as well as the feed produced by large manufacturers, could be improved by the addition of pro-vitamin A, or cod liver oil, according to the purposes of the feed, as near to the time of consumption as possible.

A carotene concentrate which is almost pure pro-vitamin A, from which the animal synthesizes vitamin A is now largely used by a major feed manufacturer to assure a sufficiency of this vitamin in its feeds at the time they leave the factory. Concentrates of carotene are available for general use, and one Indiana elevator company uses this concentrate to mix into feeds fresh as formulas are prepared for the farmers.

Where the vitamin can be added to individual lots of feed as they are mixed, as in the case of the Indiana company's line of elevators, the concentrate can be fitted to specific needs of livestock in the community. Where a farmer is feeding breeding stock he can be assured of sufficient vitamin A by addition of the recommended amount of carotene to the feed the breeding stock is receiving. If any of the livestock is showing any of the signs of vitamin A deficiency the condition can be easily corrected by adding the vitamin carrier to the feed.

In almost every community variations in feeding requirements will occur to some extent, due to differences in soil, care and feeding methods. Vitamin carriers, minerals and feed specialties give the elevator operator an opportunity to tailor-make his feeds to meet the requirements of individual farmers and feeders, and vitamin carriers, particularly enable him to make good the losses of vitamins suffered by feeds kept in store over protracted periods of time.

Feed Control Officials Program

Able speakers will appear before the Ass'n of Feed Control Officials at Washington Nov. 4 and 5 at the Hotel Raleigh.

Ralph M. Field, Chicago, president of the American Feed Manufacturers Ass'n, will deliver an address.

Others on the program are H. R. Kraybill of Lafayette, Ind.; J. W. Kellogg, Chicago, on dog foods; C. E. Buchanan on molasses and molasses feeds; J. D. Turner on fluorine in mineral feeds; W. S. Frisbie; P. B. Curtis and W. C. Geagley.

Washington is talking of lending farmers 46 cents per bushel on corn in the crib and it may prove a good sale at that price.



Elevator, Feed Mill, and Office of Peck Elevator, Peck, Mich.



Manager Roy Beers, Inspects Peck Elevator's New Hammer Mill.

"Help Poultrymen," Southern Feed Men Told

"A tremendous outlet for sales of mixed feed to farmers with small flocks of chickens lies dormant and can be awakened thru education," declared A. H. Demke, past pres. of the International Baby Chick Ass'n, before the two-day combined meeting of the Southern Mixed Feed Manufacturers Ass'n, and the Texas Feed Manufacturers Ass'n that opened in the Adolphus hotel, Dallas, Tex., Oct. 14. "Make the poultry keeper prosperous and you will help yourselves sell more feed." Mr. Demke's address, third on the morning program, held the rapt attention of every feed man, and brought a proposal from the floor that a resolution be drawn condemning such unethical business practices as offering a bag of feed free with an order for a given number of baby chicks.

J. B. EDGAR, Memphis, presided at the meeting. A welcoming address from Charles P. Shearn, Houston, pres. of the Texas Feed Manufacturers Ass'n, was followed by Mr. Edgar's official response for the Southern Mixed Feed Manufacturers Ass'n.

C. J. CRAMPTON, executive sec'y of the Dallas Chamber of Commerce stirred the delegates with his address on the "Value of Trade Ass'ns," describing some of the social and economic problems that face private business and can be met only thru group action. Said he:

"Trade ass'ns are coming back since the dark days of the NRA. New and bigger problems, legislative, social, and economic, face private industry and can be met only with progressive group action.

"A fourth branch of government has developed during the last decade, particularly in the last five years. It is associated with the administrative branch. Today Congress passes a law. This is passed to the administrative branch for execution, where it is in turn passed over to a special body of bureaucrats often purposely set up, for execution. This special administrative branch is empowered to make rules and regulations that may reach far beyond the original intent of the law. The federal government alone now has more than 150 such special administrative divisions.

"Individuals can do little to protect themselves from these self-perpetuating administrative branches. Telegrams and letters to Congressmen pile up and go unread by the lawmakers, tho kindly answered with a form letter by a clerk in his employ, but the spokesman for an industry carries the intelligent weight of numbers to back up his demands.

"Of greatest import to every private businessman is the wages and hours legislation and the tax measures which will come before the called Congress. Social security is an aim of the administration and requires intelligent consideration from all employers.

"For a number of years this government has encouraged cooperative enterprise and for the last two years a government commission has been studying European cooperative institutions. The terms of the Robinson-Patman act do not apply to cooperatives and the prospective development of cooperatives, already started, deserves study and a definite attitude on the part of trade ass'ns.

"Late organization of a Union of Federal Employees was started, largely to demand that government employes be privileged to buy at the same prices accorded the government's collective buying power. This is another way to raise wages for more than a million federal employes.

"Under the Sherman anti-trust law, and the Clayton act, business men may not come together to fix prices. But they can exchange

information on prices at which deals have been closed, and on manufacturing methods and trade practices.

"Only the force of the ballot will influence government bodies. Trade ass'ns should be active, aggressive bodies, but if they are to make themselves felt in legislative halls they must have adequate, progressive leadership. They must take a constructive attitude on government, social and economic problems."

FRED HALE, chief, division of swine husbandry, Texas Agricultural Experiment Station, gave a very learned address covering experiments with maternal vitamin A deficiency in swine, illustrating with lantern slides the misdevelopment of baby pigs and a broad list of deformities that follow lack of vitamin A, or an inadequate supply of vitamin A in the diet of the pregnant dam.

A. H. DEMKE's address reviewed the development and accomplishments of the International Baby Chick Ass'n. Using a common terminology, members in 41 states are cooperating on a plan for the improvement of poultry stocks. Latest in its promotions is the World's Poultry Congress and Exposition, and the tri-annual meeting of the World's Poultry Science Ass'n, to be held at Cleveland in August, 1939. This Congress, coming to this country for the first time since organization, is expected to enjoy representation from 40 countries and attendance exceeding a half million.

"Feed manufacturers must consider the welfare of the poultrymen and farmers who are their customers," said Mr. Demke. "Unless the poultrymen can make money they will not buy feed. Farm flocks average 71 birds, worth \$52, a relatively small investment that naturally falls into the classification of a side issue to general farming, cared for by the women and children. Relatively few poultry projects handle from 2,000 to 10,000 birds each. Large poultrymen can look after themselves, of course, but the little folks with the \$52 investments are in no position to protect their own interests.

"If feed manufacturers are open to criticism it is only in that they have taken no action as a group to help poultry feeders make more money, and thus awaken the slumbering market for thousands of tons of feed that exists in small farm flocks. These small poultry raisers need to be educated to the benefits of consistent quality, government grading of poultry products, care of their flocks. Feed men are interested in import duties on imported eggs, for foreign flocks do not eat American feed. State laws might be enacted to require producers of packaged goods in which foreign eggs are used so to state on the labels. General publicity would help to discourage the American consumers from use of products using foreign eggs. The problem is serious. If Japan conquers China it could flood the egg market in this country with cheap eggs."

Presiding Officer Edgar appointed the following committees:

RESOLUTIONS: W. D. Bomar, Fort Worth; H. L. McGeorge, Memphis; Gaylord Stone, Fort Worth.

NOMINATING: Amil Petersen, Memphis; A. F. Seay, St. Louis; J. B. Edgar, Memphis. Adjourned to Friday morning.

Friday's Session

BOISE FONTANE, of the Southern Pine Industry Com'te, New Orleans, carefully analyzed the Black-Connery wages and hours bill in the opening address at the Friday morning session.

"The southern pine industry," said Mr.

Fontane, "has awakened to the dangers of private industry in much of the legislation proposed since last January.

"The Black-Connery bill, as originally written, attempted to encompass literally all forms of gainful effort. It contemplated a maximum work week, a minimum and a maximum hourly wage. Recognizing the political danger of establishing these limits, Congress passed the buck to the administration. The Administration in turn proposed to create a five-man labor board, empowered with authority to establish the standards, and administrate the law, thus creating another one of those monstrous bureaucracies with dictatorial powers over industry. Administrative boards are political, and political boards are frequently biased.

"The increased costs that would result from setting higher wage standards, and a shorter work week, obviously would increase prices in this country and give foreign nations a big advantage in spite of our tariffs. The reciprocal trade treaties being fostered by the present administration set natural limitations on how far we can go in raising tariffs.

"The southern pine industry believes labor artificiality cannot be introduced without going farther, setting prices for manufactured and produced merchandise, setting quotas to prevent gluts on the market. Such a system has never been successful under any form of government except a dictatorship.

"Quite likely the Black-Connery measure would have the reverse effect from that anticipated by the administration. Small producers would not live up to the law; large producers would weed out all but the most efficient work-

KELLY DUPLEX MILL MACHINERY



New 1937 Model
Feed Mixer

With Latest Improve-
ments at a New Low
Price.

Write for details.

Everything
for Mill and Elevator

The Duplex Mill & Mfg. Co.

Springfield, Ohio

Grain Storage Receipts

A written receipt is indispensable to grain dealers who store grain for farmers. This receipt records the amount, kind, and grade of grain, and sets forth terms of storage as follows:

"Stored grain will be purchased at per bushel under the Chicago future, settlement to be made on or before 19.... at which date the grain described herein will be considered sold.

"Storage must be paid for at the rate of for the first days, and at the rate ofc per bushel per (month, day) thereafter until sold, this charge to include fire insurance. Deterioration and shrinkage at owner's risk."

Grain Storage Receipt book contains 75 originals of goldenrod bond paper, 75 duplicates of manila, 3 sheets of carbon, and heavy, pearl-grey pressboard covers. Shipping weight, 1 lb. Order Form 15SR. Price 95c each, or 3 books for \$2.50, plus postage.

Grain & Feed Journals

332 S. La Salle St. Chicago, Ill.
Consolidated

Southern Mixed Feed Ass'n Officials



Presiding Officer, and Treas. J. B. Edgar, Vice-Pres. Amil Petersen, and Sec'y E. P. MacNicol, all of Memphis.

men and would install an endless amount of machinery to replace man power and throw more people on relief to be supported from taxes on business."

This vicious circle should be stopped before it is started, declared Mr. Fontane. Every voter should contact his Congressmen and add the weight of his influence to prevent passage of the proposed bill.

R. M. SHERWOOD, chief, division of poultry husbandry, Texas Agricultural Experiment Station, in a meaty address on the effect of feed on the quality of poultry products, proved his points with eggs from hens that had fed on a ration containing generous amounts of cottonseed meal. The dirty brown yolks of these eggs, when compared with the pale or rich colored yolks of eggs produced by hens on recommended rations, was convincing evidence that feeds influence the color and quality of livestock and poultry products.

"What is true of poultry products," said Mr. Sherwood, "is true of other forms of farm live stock. About one-third of the cost of poultry is labor, one-third feed, and out of the remainder must come return on investment, housing facilities, taxes, and profit. Naturally, only quality products will bring the kind of prices that will show a profit. Buyers want quality."

DR. A. R. KEMMERER, assistant chemist, division of chemistry, Texas Agricultural Experiment Station, paraded the "Vitamins," stressing the need for vitamin A in animal and poultry feeding. "Since vitamin A oxidizes quickly when feeds are kept in storage, liberal allowances should be made by the manufacturer for this factor," he declared. His address is reviewed elsewhere in this number.

R. M. FIELD, Chicago, pres. of the American Feed Manufacturers Ass'n, called attention to the Feed Merchandising Council agreement under which both his and the Southern Mixed Feed Manufacturers Ass'n are working. "While the sales contracts of most of the ass'n members," said Mr. Field, "incorporate the principles of the Feed Merchandising Council plan, all do not use the same language. Consequently variations occur in interpretation of the plan. These variations would be reduced if all used the same terminology."

H. L. McGEORGE, Memphis, supporting the comments of Mr. Field, believed that the Feed Merchandising Council plan should be periodically brought to the attention of the manufacturers so that they would keep its principles ever in mind.

ELECTION of officers placed at the head of the Southern Mixed Feed Manufacturers Ass'n for the ensuing year: J. T. Weinman, Little Rock, Ark., pres.; A. E. Petersen, Memphis, Tenn., vice-pres.; J. B. Edgar, Mem-

phis, treas. Directors: R. E. Barinowski, Augusta, Ga.; G. G. Keith, Nashville, Tenn.; Charles Whyte, Pine Bluff, Ark.; E. Wilkinson, Birmingham, Ala.; C. B. Fretwell, Spar-tonburg, S. C.; H. L. McGeorge, Memphis, Tenn.; and Wayne Longmire, Knoxville, Tenn. E. P. MacNicol, Memphis, continues as sec'y.

The resolutions com'tee presented the following resolutions, which were unanimously adopted.

Resolutions Adopted Free Feed

WHEREAS, it is apparent that the practice of free deals, bonuses, premiums, etc., indulged in by feed manufacturers is pernicious and detrimental in that it encourages a wasteful competition in the endeavor of one manufacturer to outdo another, and

WHEREAS, unless the manufacturer takes a loss, which is unusual and unlikely, these practices become an added cost in the price of feeds to the consumer, thereby playing into the hands of the batch mixers and encouraging home mixing, therefore, be it

RESOLVED, that the Southern Mixed Feed Manufacturers Association, and the Texas Feed Manufacturers Association hereby condemn these practices as injurious to the industry as a whole and urge their members to clean house and do away with them altogether.

Wages and Hours

WHEREAS, the proposed wage and hour legislation to be presented to the called session of Congress fails to accord to the South the recognized lower cost of living, we urge that each member individually of the Southern and Texas Feed Manufacturers Associations contact each and every representative in Congress from his district and urge their opposition to federal wage and hour legislation.

Adjourned *sine die*.

Entertainment at Dallas

Major entertainment for the convention was the annual golf games. Qualifying rounds were played Thursday afternoon, the tournament Friday afternoon. Many handsome prizes aroused a furious interest and sharp competition, since every player felt he had a chance to win something worth the effort.

Golf prizes were distributed at the annual banquet and floor show held in the Adolphus hotel Friday evening.

Dallas Feed Box

A POPULAR spot was the Texas Room, where Anheuser-Busch kept a plentiful supply

of Michelob beer on tap. The company's J. M. Adam, R. G. Adam, G. E. Postell, and E. A. Webb, were quite willing to be helpful, but insisted that self-service was the order of the day. Every visitor had to hold his own glass under the spigot, and each was delighted to find the influence of an electric eye flowing the amber liquid generously without further ado.

Discovering at the golf course that the club house had no facilities for checking clubs until the next day, several of the players, too tired to carry their clubs back to town after the first round, hit upon the brilliant thought that if they left their clubs to be cleaned the pro would have to care for them until the next day.

SEVERAL of the ass'n members expressed themselves as having a new conception of the value of trade ass'ns, plus a greater appreciation for the things that ass'ns do, after hearing the address of Dallas' C. J. Crampton.

THE PAN American Exposition received a play from the conventionites Thursday evening, particularly the Casino show which was so well enjoyed by the grain dealers during the convention earlier in the week.

FOOTBALL enthusiasts stayed over until Saturday afternoon to watch the game between Vanderbilt and S.M.U. at Dallas, and the game between T.C.U. and Texas A. & M. at Fort Worth.

SEVERAL of the feed manufacturers

Triple XXX Alfalfa Meal

Use more of it—it's healthy!



THE DENVER ALFALFA
MILLING & PRODUCTS CO.

Merchants Exchange
ST. LOUIS

LAMAR, COLO.

Poultry Production

by Lippincott and Card

(5th Edition—Revised)

Every elevator that grinds and mixes poultry feeds needs this new, quick-reference volume, devoted to practical management of poultry enterprises. Prepared by noted authorities, it includes 238 illustrations. Considers culling, prevention and cure of diseases, incubation, brooding, housing, ventilation, etc., and gives 63 pages to selection and compounding of feeds, to feeding methods and the nutrient requirements of poultry.

Bound in cloth, 723 pages, fully cross indexed. Weight 4 lbs. Price, \$1.00, plus postage.

Grain & Feed Journals

Consolidated

332 S. La Salle St.

Chicago, Ill.



Corn Gluten Feed, Corn Oil Cake Meal,
Brewers' Dried Grains Malt Sprouts
ANHEUSER-BUSCH ST. LOUIS

Poultry Feeds and Feeding

brought their wives along. The ladies were entertained with a luncheon Thursday afternoon, and a style show by mannequins from one of the city's leading department stores.

PENCILS were distributed by Myles Salt Co. An uncommonly large number of feed men carry notebooks in their pockets all the time, in which they jot down ideas as they occur. The convention nearly filled every notebook.

Convention Attendance

E. A. Berry, Chicago, represented the machinery salesmen.

J. T. Sexton, Kansas City, represented the brokerage interest.

J. M. and R. G. Adam, G. E. Postell and E. A. Webb of St. Louis represented Anheuser-Busch, Inc.

V. C. Fuqua represented the State Department of Agriculture, and F. D. Fuller, Fred Hale and James Sullivan represented the State College.

The Denver Alfalfa Milling & Products Co. was represented by O. E. Nelson and Floyd M. Wilson of Lamar, Colo., and R. E. Nye of St. Louis, Mo.

Bag manufacturers were represented by W. J. Barker, Ft. Worth; F. V. Deaderick, Houston; N. W. Gary and S. P. Herd, Dallas; H. C. Laney, Ft. Worth; Adolf Mayer and Geo. W. Williams, Dallas.

Grain firms were represented by R. T. Dorsey, Fort Worth; V. F. Ferneau, Blanchester, Ohio; M. D. Johnston, Fort Worth; E. LaBudde, of the LaBudde Feed & Grain Co., Milwaukee, Wis.; and J. M. Trenholm, Memphis, Tenn.

R. M. Field, pres., represented the American Feed Manufacturers Ass'n, Chicago; E. P. MacNicol, sec'y, the Southern Mixed Feed Manufacturers Ass'n, Memphis, Tenn.; and Ray W. Wilson, the National Cottonseed Products Ass'n, Dallas.

Suppliers were represented by Gustaf Ackerman, New Rochelle, N. Y.; Clifford Bracken, Dallas; Les. Brown, Harrison, N. J.; J. C. Bishop, Chicago; M. R. Cassell of the Health Products Corp., Newark, N. J.; Bob Crawford, St. Louis, Mo.; A. H. Demke, Stephenville, Tex.; R. Eschenheimer, Harrison, N. J.; Max Goldsmith, Dallas; G. F. Hillier, Cedar Rapids, Ia.; J. H. Leftwich, Mobile, Ala.; U. P. Lincoln, San Antonio, Tex.; Felix Meyer and A. F. Miller, Houston; D. Molof, Vineland, N. J.; P. R. Slaughter, Laredo, Tex.; Wm. R. Threat, Dallas; Vic Jay, Harrison, N. J.; W. J. Westerman, St. Louis, Mo.; T. C. Wilkinson, Chicago; J. F. Williox, Dallas, and Lewis Winter, Ft. Worth, Tex.

Ladies in attendance were: Mrs. Gustaf Ackerman, New Rochelle, N. Y.; Lucy Ellen Adam, St. Louis, Mo.; Mrs. J. M. Adam, St. Louis, Mo.; Mrs. G. E. Hillier, Cedar Rapids, Ia.; Mrs. John S. Hornbuckle, Houston, Tex.; Mrs. R. E. Nye, St. Louis, Mo.; Mrs. A. F. Seay, St. Louis, Mo.; Mrs. R. M. Sherwood, College Station, Tex.; Mrs. E. A. Webb, St. Louis, Mo., and Mrs. Floyd M. Wilson, Lamar, Colo.

Feed Manufacturers and Millers in Attendance were: Wiley Atkins, Dallas; R. T. Baker, W. P. Bomar, R. W. Bridges, W. W. Bridges, K. H. Childress, Ft. Worth; L. E. Church, Houston; H. L. Colwell, R. E. Cowan, Ft. Worth; W. H. Culpepper, Beaumont; W. D. Deacon, Grapevine, Tex.; J. J. Dial, Ft. Worth; J. B. Edgar, Memphis, Tenn.; C. A. Evans, W. C. Homeyer, Ft. Worth; Fred Honea, Jr., W. J. Lawther, Dallas; H. L. McGeorge, Memphis, Tenn.; T. E. Melcher, El Campo, Tex.; Joe S. Morris, Amarillo, Tex.; A. C. Peterson of the Quaker Oats Co., Memphis, Tenn.; E. B. Royce, Dallas; A. F. Seay, St. Louis, Mo.; B. E. Schmitt, Sequin, Tex.; Chas. P. Shearn, Jr., Houston; O. R. Simpson, Jav D. Smith, Dallas; M. M. Stiversen, Centerville, Ia.; Gaylord J. Stone, Ft. Worth; John A. Tatam, Greenville, Tex.; P. F. Walsh, Ft. Worth.

The Federal Surplus Commodities Corporation announced Oct. 9 that it would purchase grapes in Southwest Michigan to boost the price, as requested by growers.

Lafayette, Ind.—The nineteenth annual Poultry Short Course will be held at Purdue University Nov. 8 to 20. Both new developments and well established poultry practices will be presented. The course aims to train those attending to conduct their work more efficiently and profitably thru a systematic study in modern and practical methods. Anyone may attend who desires. Former students include both beginners and experienced people, who are engaged in various phases of poultry farming, hatchery operation, egg and poultry buying, feed and supply dealers. Both men and women have attended past courses. Detailed information will be supplied upon request to the Poultry Department at Purdue.

More Hens in Farm Flocks

Washington, D. C., Oct. 18.—The number of hens in farm flocks on Oct. 1 shows an increase of 7.3 per cent over numbers on Sept. 1, compared with a 10-year average increase during September of 6.5 per cent. The seasonal gain this year is much less, however, than the increase of 11.7 per cent during the month of September last year. Owing to the smaller supply of pullets for building up the flocks this year, the average number of layers per flock, which on Sept. 1 was the same as last year, had fallen on Oct. 1 to 4 per cent less than last year, and was about 9 per cent less than the 10-year average number in October.

The large proportion of young hens in the laying flock from last year's hatchings, and the very favorable weather and abundant supply of feed, have given record high rate of laying for Oct. 1. The reported number of eggs laid per 100 hens of laying age is the highest for Oct. 1 in the entire series beginning with 1925. This is the sixth successive month of record high seasonal egg production. Even tho layers are fewer in number, the high rate of production per hen has resulted in a total production of eggs 9.6 per cent greater than a year ago and 3.4 per cent greater than the reported 10-year average production for Oct. 1.—U. S. Dept. of Agriculture.

How Feed Affects Quality

By ROSS M. SHERWOOD, of Tex. Agri. Exp. Sta., before Southern Mixed Feed Mrs. Ass'n.

It has long been known that strong flavors of feed affect the flavor of milk, butter and eggs.

We have proved that cottonseed meal and cotton leaves fed to hens cause them to lay eggs that either are bad when laid or deteriorate in storage. This is due to the cotton fat in this feed material or to other material such as gossypol which is closely associated with the cotton fat. The change in the quality of the eggs in storage from hens fed cotton products seems to be the result of the egg changing from slightly acid to slightly alkaline. We can bring on this change artificially in less than an hour altho it takes several months in storage.

We have proved that the vitamin A and D content of eggs is affected by the amount of these vitamins in the feed.

We have heard a great deal of fishy flavor in turkeys. Probably the feeding of excessive amounts of low grade fish oils is the cause of most of this. We have given chickens the flavor of cod liver oil by feeding excessive amounts to them.

If an animal eats large quantities of a fat it will lay on fat of the nature eaten rather than that of its own particular species or type. In an experiment years ago a dog was starved until thin and then fed mutton tallow. He fattened but put on sheep fat instead of dog fat.

Succulence in Poultry Rations

By M. WAYNE MILLER, Western Washington Exp. Sta.

Three rations were fed in duplicate to six lots composed of 60 single comb white Leghorn pullets each. Lot 1 received 5 per cent artificially dried alfalfa as a sole source of green feed. Lot 2 received both artificially dried alfalfa and succulent green feed, while Lot 3 was fed succulent green feed as the sole green feed supplement.

The green feed supplement was kale for the first three 28-day periods, carrots for the second three periods, and lawn clippings for the last periods of the trial. Yellow corn and cod liver oil supplied additional quantities of vitamin A to bring the total vitamin A intake above the requirement of laying pullets.

Results based on egg production, egg weight, mortality, body weight, and egg quality showed that the succulent quality of green feed is of no value in poultry rations that are supplemented with 5 per cent dehydrated alfalfa and which supplies the vitamin A requirements of the pullets.

Control of Yolk Color

Professor H. E. Botsford of the New York State College of Agriculture, says yolk color can be controlled by feeding.

A substance called Xanthophyll is found in some feeds, and presence of this pigment in the feed eaten by the birds gives color to the yolk. Too much gives too dark a color. Feeds containing large amounts include green cabbage leaves, yellow corn, alfalfa leaf meal, and such growing green feeds as alfalfa, clover, grass, oats, rye and rape.

Feeds with small amounts include white cabbage leaves, white corn, mangels, wheat, oats, barley and buckwheat.

He says the problem of feeding chicks is complicated because the large amounts of vitamin A found in Xanthophyll-bearing feeds is a necessity for growth, but with laying hens, excessive amounts will cause dark yolks.

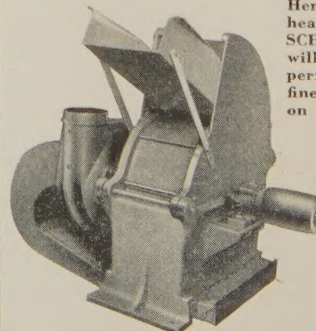
The way eggs are handled at the farm enters into the picture. Eggs with a thin albumen intensify yolk shadows when candled, and the yolk appears to be darker than is actually true. To remedy this, Professor Botsford says, eggs should be kept cool and birds bred to produce eggs with thicker albumen.

There Are 10 Big Reasons WHY

so many elevator operators are selecting SCHUTTE Hammer Mills despite the terrific current competition.

This fool-proof grinder is built to last long after other grinders are in the junk pile. The heavy base maintains parts in perfect alignment.

Hence, years after heavy operation a SCHUTTE grinder will give the same performance and fine grinding as on its first day.



Send for the 10 Big Reasons!

Schutte Pulverizer Co.

27 Clyde Avenue

Buffalo, New York

CHECK
YOUR
FORMULAS
with
Laboratory
Analyses

Protein, Fat, and Fibre
—Feed or Grain—
Analyzed at
Reasonable Rates
Runyon Testing Laboratories
1106 Board of Trade Chicago, Illinois
"Runyon Analyse Help Sell Feeds"

GRAIN & FEED JOURNALS Consolidated

Manganese Needed in Poultry Diet

By W. D. GALLUP and L. C. NORRIS,
Cornell University.

Further evidence has been obtained of the physiological importance of manganese in the nutrition of poultry. At two weeks of age the average gain made, on a manganese deficient diet, by chicks showing symptoms of perosis was greater than that made by the unaffected chicks. At the end of six weeks the average gain made by the unaffected chicks was the greater. The average six weeks' gain made by the unaffected chicks was less, however, than that made by chicks that received adequate manganese.

Growth of chicks from six weeks to maturity was retarded when the manganese content

of their diet was reduced from 50 parts per million to 10 p.p.m. Bowing of the legs and unsteady gait developed in the chicks that received this low-manganese diet. An increase in the manganese content of the diet to 1,000 p.p.m. did not cause the development of observable toxic symptoms.

A few chicks developed perosis on diets containing 50 p.p.m. of manganese. These isolated cases which developed early in life could not be prevented by adding manganese in high concentration to the drinking water or to the feed.

Pullets on a diet containing 13 p.p.m. manganese produced less than half the number of eggs per pullet than did those on a diet containing 200 p.p.m. of manganese. The percentage hatch of the fertile eggs from the low-manganese group was also less than half that of the high-manganese group. The manganese

content of eggs was markedly reduced below that of normal eggs or greatly increased above the normal amount by appropriate adjustments in the manganese content of the diet fed the hens. A possible relationship between the manganese content of the breeder diet and the susceptibility of chicks to perosis is under investigation.

Cotton Legislative Schemes Fail

A succession of attempts to legislate better income to cotton growers and control of cotton production through bonus and other subsidies, involving the expenditure of millions in taxpayers' funds, has resulted in an all-time low value of cotton, based on the gold content of the dollar.

The danger of this, it has been pointed out by W. R. Meadows, cotton registrar of the Chicago Board of Trade, is that the approaching session of congress contemplates the enactment of ever-normal granary and similar agricultural schemes which, in effect, will continue policies which brought cotton prices to a new bottom level.

"When January cotton contracts sold at 7.36 on Oct. 8 it was the equivalent of about 4 3/8 cents per pound in terms of the old gold content standard of the dollar—the lowest price of record," Mr. Meadows stated in a review of legislative failures.

"Cotton prices of about 18 1/2 cents per pound gold basis were declared 'too low' by the federal farm board in 1930 and a 16-cent loan was proffered to hold up the price.

"Despite this and other generous support with taxpayers' funds, the bottom of the decline which ensued was reached in 1932 when cotton sold around 4 3/4 cents per pound in full value currency and the farm board had lost about 350 million dollars in its cotton and grain control operations.

"Soil conservation, after the AAA was declared unconstitutional and the Bankhead Act abandoned, was a thinly disguised continuance of the policies of the AAA. It was based, however, upon personal compliance and, as farmers refused to adhere to the scheme, this year's cotton crop, estimated at 17 1/4 million bales, resulted.

"Boiled down to its simple results—all the control of 1933, 1934, 1935, and 1936, the millions of taxpayer monies spent, were completely nullified by this year's big crop. And cotton, the big export agricultural product of the U. S. A., which must be sold on a gold basis, fell from 18 1/2c gold to 4 3/8c gold. It is true that other nations have gone off the gold standard, but in export business the terms of currency may change but the basis remains constant; that is, the interchange of products in export is reckoned on undebased currency."

600-12,090 Pounds to Bushels

Large
Clear
Type

Direct Reduction Grain Tables										32
32 lbs. per bushel — OATS										48
600-12.11	1100-11.11	1500-10.11	2100-9.11	2700-8.11	3300-7.11	3900-6.11	4500-5.11	5100-4.11	5700-3.11	56
600-12.12	1100-11.12	1500-10.12	2100-9.12	2700-8.12	3300-7.12	3900-6.12	4500-5.12	5100-4.12	5700-3.12	60
600-12.13	1100-11.13	1500-10.13	2100-9.13	2700-8.13	3300-7.13	3900-6.13	4500-5.13	5100-4.13	5700-3.13	70
600-12.14	1100-11.14	1500-10.14	2100-9.14	2700-8.14	3300-7.14	3900-6.14	4500-5.14	5100-4.14	5700-3.14	75
600-12.15	1100-11.15	1500-10.15	2100-9.15	2700-8.15	3300-7.15	3900-6.15	4500-5.15	5100-4.15	5700-3.15	
600-12.16	1100-11.16	1500-10.16	2100-9.16	2700-8.16	3300-7.16	3900-6.16	4500-5.16	5100-4.16	5700-3.16	
600-12.17	1100-11.17	1500-10.17	2100-9.17	2700-8.17	3300-7.17	3900-6.17	4500-5.17	5100-4.17	5700-3.17	
600-12.18	1100-11.18	1500-10.18	2100-9.18	2700-8.18	3300-7.18	3900-6.18	4500-5.18	5100-4.18	5700-3.18	
600-12.19	1100-11.19	1500-10.19	2100-9.19	2700-8.19	3300-7.19	3900-6.19	4500-5.19	5100-4.19	5700-3.19	
600-12.20	1100-11.20	1500-10.20	2100-9.20	2700-8.20	3300-7.20	3900-6.20	4500-5.20	5100-4.20	5700-3.20	
600-12.21	1100-11.21	1500-10.21	2100-9.21	2700-8.21	3300-7.21	3900-6.21	4500-5.21	5100-4.21	5700-3.21	
600-12.22	1100-11.22	1500-10.22	2100-9.22	2700-8.22	3300-7.22	3900-6.22	4500-5.22	5100-4.22	5700-3.22	
600-12.23	1100-11.23	1500-10.23	2100-9.23	2700-8.23	3300-7.23	3900-6.23	4500-5.23	5100-4.23	5700-3.23	
600-12.24	1100-11.24	1500-10.24	2100-9.24	2700-8.24	3300-7.24	3900-6.24	4500-5.24	5100-4.24	5700-3.24	
600-12.25	1100-11.25	1500-10.25	2100-9.25	2700-8.25	3300-7.25	3900-6.25	4500-5.25	5100-4.25	5700-3.25	
600-12.26	1100-11.26	1500-10.26	2100-9.26	2700-8.26	3300-7.26	3900-6.26	4500-5.26	5100-4.26	5700-3.26	
600-12.27	1100-11.27	1500-10.27	2100-9.27	2700-8.27	3300-7.27	3900-6.27	4500-5.27	5100-4.27	5700-3.27	
600-12.28	1100-11.28	1500-10.28	2100-9.28	2700-8.28	3300-7.28	3900-6.28	4500-5.28	5100-4.28	5700-3.28	
600-12.29	1100-11.29	1500-10.29	2100-9.29	2700-8.29	3300-7.29	3900-6.29	4500-5.29	5100-4.29	5700-3.29	
600-12.30	1100-11.30	1500-10.30	2100-9.30	2700-8.30	3300-7.30	3900-6.30	4500-5.30	5100-4.30	5700-3.30	
600-12.31	1100-11.31	1500-10.31	2100-9.31	2700-8.31	3300-7.31	3900-6.31	4500-5.31	5100-4.31	5700-3.31	
600-12.32	1100-11.32	1500-10.32	2100-9.32	2700-8.32	3300-7.32	3900-6.32	4500-5.32	5100-4.32	5700-3.32	
600-12.33	1100-11.33	1500-10.33	2100-9.33	2700-8.33	3300-7.33	3900-6.33	4500-5.33	5100-4.33	5700-3.33	
600-12.34	1100-11.34	1500-10.34	2100-9.34	2700-8.34	3300-7.34	3900-6.34	4500-5.34	5100-4.34	5700-3.34	
600-12.35	1100-11.35	1500-10.35	2100-9.35	2700-8.35	3300-7.35	3900-6.35	4500-5.35	5100-4.35	5700-3.35	
600-12.36	1100-11.36	1500-10.36	2100-9.36	2700-8.36	3300-7.36	3900-6.36	4500-5.36	5100-4.36	5700-3.36	
600-12.37	1100-11.37	1500-10.37	2100-9.37	2700-8.37	3300-7.37	3900-6.37	4500-5.37	5100-4.37	5700-3.37	
600-12.38	1100-11.38	1500-10.38	2100-9.38	2700-8.38	3300-7.38	3900-6.38	4500-5.38	5100-4.38	5700-3.38	
600-12.39	1100-11.39	1500-10.39	2100-9.39	2700-8.39	3300-7.39	3900-6.39	4500-5.39	5100-4.39	5700-3.39	
600-12.40	1100-11.40	1500-10.40	2100-9.40	2700-8.40	3300-7.40	3900-6.40	4500-5.40	5100-4.40	5700-3.40	
600-12.41	1100-11.41	1500-10.41	2100-9.41	2700-8.41	3300-7.41	3900-6.41	4500-5.41	5100-4.41	5700-3.41	
600-12.42	1100-11.42	1500-10.42	2100-9.42	2700-8.42	3300-7.42	3900-6.42	4500-5.42	5100-4.42	5700-3.42	
600-12.43	1100-11.43	1500-10.43	2100-9.43	2700-8.43	3300-7.43	3900-6.43	4500-5.43	5100-4.43	5700-3.43	
600-12.44	1100-11.44	1500-10.44	2100-9.44	2700-8.44	3300-7.44	3900-6.44	4500-5.44	5100-4.44	5700-3.44	
600-12.45	1100-11.45	1500-10.45	2100-9.45	2700-8.45	3300-7.45	3900-6.45	4500-5.45	5100-4.45	5700-3.45	
600-12.46	1100-11.46	1500-10.46	2100-9.46	2700-8.46	3300-7.46	3900-6.46	4500-5.46	5100-4.46	5700-3.46	
600-12.47	1100-11.47	1500-10.47	2100-9.47	2700-8.47	3300-7.47	3900-6.47	4500-5.47	5100-4.47	5700-3.47	
600-12.48	1100-11.48	1500-10.48	2100-9.48	2700-8.48	3300-7.48	3900-6.48	4500-5.48	5100-4.48	5700-3.48	
600-12.49	1100-11.49	1500-10.49	2100-9.49	2700-8.49	3300-7.49	3900-6.49	4500-5.49	5100-4.49	5700-3.49	
600-12.50	1100-11.50	1500-10.50	2100-9.50	2700-8.50	3300-7.50	3900-6.50	4500-5.50	5100-4.50	5700-3.50	

No
Eye
Strain

Reducing pounds to bushels without loss of time or expensive errors during the rush of grain to market is accomplished by the use of Clark's Direct Reduction Grain Tables. These 12 tables are printed from large clear type on seven cards of heavy six ply tough check. The spiral binding prevents the exposure of more than one table at a time; permits all cards to lie flat; keeps cards in regular sequence and wide open where wanted.

The correct number of bushels and pounds over in any weight of grain from 600 to 12,090 pounds is shown at the immediate right of the given weight. Open spaces between groups of five weights and rules between columns minimize the opportunity for error in reading.

The seven cards are 10 3/4 x 12 3/4 inches with marginal index and spiral wire bound across top so as to facilitate quick reference to any table. No calculations necessary. These convenient tables show the reduction of any weight from 600 to 12,090 pounds to bushels of 32, 48, 56, 60, 70 and 75 lbs. by 10 pound breaks. Price \$1.50 plus postage. Weight 2 lbs. Order 3275 Spiral.

Grain & Feed Journals

Consolidated

Headquarters—Books for Grain Dealers

332 S. La Salle St.

Chicago, Ill.

Practical Poultry Farming

By L. M. Hurd

This revised and enlarged edition is right up-to-date and contains all important discoveries in poultry raising made in recent years.

The book contains the latest information on feeding, a complete discussion of the new vitamin G, practical information on the two-story poultry house and heating, disinfecting incubators, battery brooding and raising chicks on screened platforms, and the latest discoveries in treating pests and diseases, including Leukemia, and the newest information on disinfecting houses. This edition also describes the new methods of feeding turkeys.

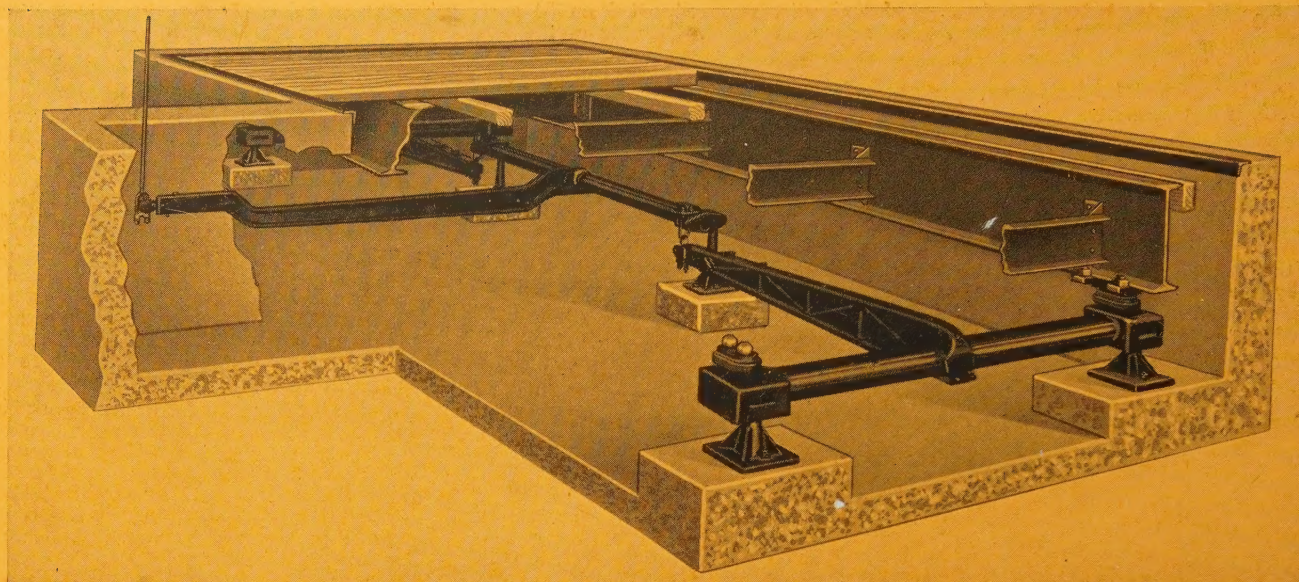
Printed on enamel book paper from large type and well bound in cloth. 480 pages, 33 chapters, and 200 engravings. Weight 2 lbs. Price \$2.50 plus postage.

Grain & Feed Journals

Consolidated

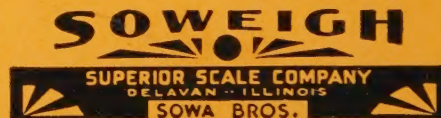
332 S. La Salle St.

Chicago, Ill.



The Soweigh Heavy Duty Motor Truck Scale is the only motor truck scale manufactured that has positive moisture protected bearings and knives. You need not be a scale man to realize that the knives and bearings are the "heart" of your scale, and the life of your scale depends upon their protection from the elements. *Address all inquiries to*

SUPERIOR SCALE CO., Delavan, Illinois
or
R. R. HOWELL & COMPANY, Minneapolis, Minn.
Northwest Distributor



How Much Can We Save You?



Webster Equipment for handling grain, speeds up production and reduces costs.

Our modernized production facilities assures prompt deliveries of Webster Equipment.

Webster engineers are experienced in conveyors of every type. We will make a survey of your plant and make a recommendation of equipment that will give you the most economical, dependable service in handling grain.

Write today. Our staff is ready to serve you. There are no obligations.

The Webster Mfg. Company
Tiffin, Ohio

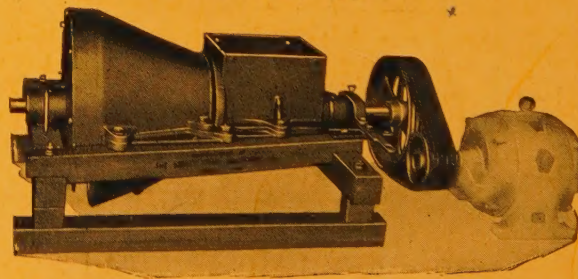
Over 60 years' experience—Installations in most of the world's largest elevators and processing plants.

Call in the
WEBSTER Man



Sidney Corn Shellers

Hyatt Equipped



All shellers are adjustable for different kinds and sizes of corn.

Made in five sizes 80 to 1,500 bushels per hour. Available in several styles.

Be prepared to do a bigger and better shelling business. These shellers cost so little and do so much you can't afford to be without one.

Send for descriptive literature.

The Sidney Grain Machinery Co.
Sidney, Ohio

Complete Equipment for Grain Elevators and Feed Mills